ENT00575H
Submitted: October 2, 2012
WELL ID: MW 52 - 181

SAMPLE ID: 006

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 4/22/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

171.0 to 198.1

SAMPLING PORT

181 1

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0924	0	PUMP ON						9/12	45
0925	0.05	12.80	1.195	1.74	5.71	71.3	7.14		
0930	0.20	12.93	1.123	1.41	6.02	45.4	3.76		
0935	0.35	13.00	1.087	0.95	6.41	3.3	2.03		
0940	0.50	13.12	1.068	0.102	6.71	-18.4	4.84		
0945	0.105	13.27	1.059	0.46	6.90	-26.5	2.91		
0950	0.30	13.38	1.054	0.33	7.06	-24.3	1.77		
0955	1.05	13.36	1.053	0.29	7.16	-32.8	1.64		
1000	1.20	13.49	1.050	0.27	7.18	-37.7	1.53		
1005	1.30	13.48	1.049	0.23	7.22	-38.6	1.47		
1006	START SAMPLE COLLECTION								
1022	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200-701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
EVIDENCE OF WATER INFILTRATION

WELL ID: MW-53-92
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/18/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 55.87 GW Elevation 14.06

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	H$_2$O Purge Notes gal
0950	25.955	PUMP	ON		6.50			5/30	35	
1004	25.823	12.28	6.782	10.75	~~9.78~~	145.4	12.13			0.01
1014	25.834	12.105	5.962	5.25	6.50	147.6	10.83			0.10
1020	25.839	12.57	5.462	6.00	7.05	145.5	9.98			0.20
1028	25.832	12.51	4.971	6.78	6.64	138.6	8.40			0.25
1035	25.799	12.48	4.543	7.04	6.74	126.8	6.52			0.30
1040	25.804	12.48	4.380	7.23	6.61	127.0	4.81			0.35
1045	25.795	12.47	4.271	7.16	6.78	121.7	5.06			0.40
1050	25.784	12.41	4.204	7.22	6.75	117.6	5.31			0.45
1055	25.788	12.46	4.094	7.36	6.73	115.9	5.04			0.50
1100	25.783	12.33	3.976	7.59	6.82	112.1	4.66			0.55
1105	25.770	12.33	3.910	7.54	6.85	110.5	4.24	↓	↓	0.60
1108	START	SAMP	LE COLLECTION							
1245	END SA	MPLE	COLLECT	ION: 2	LIPE					
				2	L DE					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007012574

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition GOOD - MISSING BOLTS

NOTES AND OBSERVATIONS:

Total volume purged ~~2.0~~ 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-53-120
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 50'S

PROJECT NO: 01.0017869.92
DATE: 4/18/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

120 (DTB) - 57.81 (DTW) = 62.19 **Well Column Height** ft

Well Vault Condition GOOD - MISSING BOLTS
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 62.19 x 0.041 **Multiplier** = 2.55 **Well Volume** gal

2.55 x 1.5 = 3.82 **Designed Purge Volume** gal

TOTAL VOLUME PURGED: 4.50 gal

WATER QUALITY: DTW = 57.81 GW Elevation 12.38

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1116	0	—	PUMP ON						N/A	N/A	
1119	0.25	—	14.11	1.711	9.32	6.26	222.3	65.22			
1123	0.50	—	15.41	1.637	10.64	6.27	203.1	143.5			
1126	1.00	—	15.56	1.707	20.12	6.36	194.7	148.4			
1130	2.00	—	15.70	1.775	32.42	6.40	185.1	103.2			
1134	2.50	—	15.79	1.809	35.11	6.45	176.4	98.45			
1136	3.00	—	15.81	1.820	35.65	6.46	172.6	100.6			
1137	3.50	—	15.83	1.826	34.12	6.46	169.8	96.81			
1139	4.00	—	15.87	1.831	18.55	6.56	167.1	90.90			
1140	START SAMPLE COLLECTION										
1152	END SAMPLE COLLECTION: 2L IPEC										
					2L DEC						
	PUMP OFF										

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 54 - 37

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

29.0 to 42.0

SAMPLING PORT

37 6

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					6/4	20
1130	0.7	20.97	2.440	1.04	7.16	24.7	0.94	↓	↓
1135	1.0	20.97	2.459	0.96	7.22	47.9	0.96		
1140	1.35	20.95	2.470	0.94	7.25	57.3	0.71		
1145	1.65	20.92	2.472	0.94	7.27	61.6	0.82		
1150	2.00	20.91	2.474	0.94	7.28	64.3	1.06		
1152	START	SAMPLE	COLLECTION						
1208	END	SAMPLE	COLLECTION: 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 2.15 gal

WELL ID: MW 54 - 58

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

58 5

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					6/4	20
1130	0.25	20.76	2.037	0.83	6.53	-61.2	0.44		
1135	0.50	20.74	2.034	0.50	6.62	-64.2	1.00		
1140	0.75	20.73	2.056	0.39	6.69	-61.3	1.27		
1145	1	20.70	2.083	0.35	6.73	-60.8	0.92		
1150	1.25	20.69	2.102	0.33	6.75	-57.8	0.87	↓	↓
1154	START	SAMPLE COLLECTION							
1204	END PUMP	SAMPLE COLLECTION: 2 IPEC OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 1.40 gal

WELL ID: MW 54 - 123

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° RAIN

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1130	0	PUMP	ON					6/4	20
1130	0.20	20.71	1.824	0.35	6.25	-66.6	1.22	↓	↓
1135	0.40	20.76	1.825	0.26	6.52	-61.5	0.70		
1140	0.50	20.76	1.826	0.17	6.75	-58.0	0.48		
1145	0.60	20.75	1.827	0.15	6.86	-53.4	0.81		
1150	0.70	20.74	1.827	0.12	6.92	-50.6	1.03		
1155	0.80	20.72	1.828	0.12	6.96	-48.5	0.26		
1200	0.95	20.72	1.827	0.11	6.98	-47.1	0.36	↓	↓
1202	START	SAMPLE	COLLECTION						
1222	END	SAMPLE	COLLECTION; 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Well is in good shape, no problems.

Total volume purged 1.10 gal

WELL ID: MW 54 - 144

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° Rain

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 2.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	20.99	1.869	2.07	6.15	5.3	1.01	↓	↓
0910	0.5	20.68	1.868	0.49	6.63	66.3	0.77		
0920	1	20.43	1.880	0.37	6.85	80.6	0.98		
0925	1.75	20.25	1.888	0.31	6.97	82.7	1.01		
0930	2	20.16	1.891	0.31	7.01	82.8	0.79		
0935	2.25	20.11	1.892	0.32	7.04	82.9	0.87		
0937	START	SAMPLE	COLLECTION						
0950	END OF	SAMPLE	COLLECTION: 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Well is in good shape, no problems.

Total volume purged 2.40 gal

WELL ID: MW 54 - 173

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° Rain

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	21.07	2.321	0.95	5.48	-31.7	1.47	↓	↓
0910	0.5	20.76	2.318	0.27	6.08	-68.8	0.35		
0920	1	20.50	2.313	0.18	6.37	-78.0	0.59		
0925	1.4	20.31	2.312	0.14	6.52	-77.0	0.71		
0930	1.6	20.23	2.312	0.13	6.58	-78.5	0.32		
0935	1.8	20.16	2.312	0.13	6.62	-76.6	0.66		
0940	2.0	20.12	2.311	0.11	6.66	-77.1	0.94		
0942	START	SAMPLE	COLLECTION						
0956	END	SAMPLE	COLLECTION : 2L		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems. Pulled data logger for repair, could not connect even after replacing the batteries.

Total volume purged 2.15 gal

WELL ID: MW 54 - 190

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 58° Rain

PROJECT NO: 01.0017869.92
DATE: 4/12/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

185.0 to 203.6

SAMPLING PORT

190 1

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0855	0	PUMP	ON					7.5/6.7	36
0900	0.2	21.19	2.033	0.79	5.81	-44.1	0.82	↓	↓
0910	0.5	20.91	1.990	0.25	6.75	-34.4	0.95		
0920	1	20.62	1.985	0.16	7.04	-16.2	0.73		
0925	1.4	20.43	1.985	0.13	7.09	-0.1	0.80		
0930	1.5	20.36	1.984	0.13	7.11	6.8	0.88		
0935	1.75	20.29	1.985	0.13	7.12	13.0	0.54		
0940	1.95	20.23	1.985	0.12	7.13	17.8	0.52		
0945	2.05	20.20	1.985	0.11	7.14	21.0	0.38	↓	↓
0947	START	SAMPLE	COLLECT	ION					
1001	END	SAMPLE	COLLECT	ION: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Well is in good shape, no problems

Total volume purged 2.20 gal

WELL ID: MW-56-53
SAMPLE ID: 010

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60'S

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 38.26 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes (gal)
1016	38.25	PUMP	ON					7/7.5	25	0
1036	38.28	16.65	1.729	1.89	5.58	-89.1	2.41			0.01
1046	38.27	17.40	1.831	7.09	5.70	-94.8	3.94			0.05
1056	38.23	18.09	1.871	7.78	6.03	-101.8	3.72			0.08
1101	38.23	18.30	1.889	7.38	6.12	-103.4	2.98	6/7		0.09
1107	38.24	18.84	1.908	7.82	6.30	-101.9	2.70			0.10
1112	38.25	19.08	1.917	7.74	6.39	-97.6	2.64			0.12
1117	38.26	19.14	1.949	7.46	6.54	-93.5	2.76			0.15
1122	38.27	18.76	1.999	7.94	6.61	-93.1	2.16			0.18
1127	38.27	18.79	2.016	8.36	6.64	-91.1	2.14			0.20
1132	38.28	18.77	2.023	7.99	6.67	-89.5	2.10			0.25
1134	START SAMPLE COLLECTION									
1208	END SAMPLE COLLECTION: 2 L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition BAD - WELL VAULT LID BREAKING AT HINGE. EVIDENCE OF SURFACE WATER INFILTRATION. BOTTOM OF VAULT SATURATED AND SURFACE TRASH AND DEBRIS FROM SURROUNDING AREA (i.e. cigarette butts)

Total volume purged 0.40 gal

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-56-53
SAMPLE ID: 012

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 60's

PROJECT NO: 01.0017869.92
DATE: 4/27/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

83 (DTB) - 43.42 (DTW) = 39.58 ft **Well Column Height**

Well Vault Condition SEE MW-56-53
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 39.58 x 0.041 (Multiplier) = 1.1622 (Well Volume) gal

1.1622 x 1.5 = 2.43 gal **Designed Purge Volume**

TOTAL VOLUME PURGED: 2.50 gal

WATER QUALITY: DTW = 43.42 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1217	0	—	PUMP	ON					
1222	0.01	—	17.31	0.286	6.04	7.18	-53.0	232.3	DIRTY, DEBRIS FROM SURFACE WATER
1241	0.20	—	18.71	0.604	4.71	6.47	-40.6	222.8	
1243	0.50	—	16.05	1.192	4.39	6.45	-39.6	120.5	
1328	PUMP OFF.	YSI FLOW THROUGH CELL CLOGGED. SEE NOTES.							
1330	PUMP	ON. YSI FLOW THROUGH CELL CLEARED OF DEBRIS							
1333	1.0	—	16.53	1.768	8.89	7.29	-25.2	25.31	
1337	1.5	—	16.54	1.783	4.73	7.09	-14.3	15.94	
1339	2.0	—	16.93	1.757	4.00	7.05	-17.1	12.07	
1341	2.4	—	16.81	1.744	3.76	7.04	-16.8	10.57	
1342	START SAMPLE COLLECTION								
1346	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	2007012154

NOTES AND OBSERVATIONS: FLOW THROUGH CELL CLOGGING DUE TO SURFACE WATER DEBRIS INFILTRATION FROM PREVIOUS PRECIPITATION EVENTS. DEBRIS SURFACE DEBRIS INCLUDES CIGARETTE BUTTS AND ORGANIC MATTER

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-57-11
SAMPLE ID: 007

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

11 (DTB) - 3.67 (DTW) = 7.33 ft **Well Column Height**

Well Vault Condition FAIR - BOLTS STRIPPED
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 7.33 x 0.041 (**Multiplier**) = 0.30 (**Well Volume**) gal

WELL VAULT FLOODED

0.30 x 1.5 = 0.45 gal **Designed Purge Volume**

TOTAL VOLUME PURGED: 0.75 gal

WATER QUALITY: DTW = 3.67 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	3.167	PUMP	ON 2.674	3.81	6.81			
1007	0.2	19.78 ~~2.674~~	~~3.31~~	~~6.81~~	~~187.9~~	187.9	0.61		
1011	0.35	~~19.9~~	19.91	2.665	3.46	7.07	214.3	0.65	
1014	0.50	——	19.96	2.665	3.43	7.09	210.0	0.69	
1017	START SAMP	LE COLLECTION							
1028	END SAMPLE	COLLECTION: 2L	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-57-20
SAMPLE ID: 007

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition SEE MW-57-11
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

20 (DTB) - 3.68 (DTW) = 16.32 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 16.32 x 0.041 (Multiplier) = 0.67 (Well Volume) gal

0.67 x 1.5 = 1.0 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 1.15 gal

WATER QUALITY: DTW = 3.68 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	3.68	PUMP ON 19.95	2.997	4.94	6.97			
~~1007~~	0.2	~~19.95~~	~~2.797~~	~~4.944~~	~~6.99~~	~~184.5~~	-184.5	8.97	
1011	0.35	—	20.09	2.731	4.24	6.85	-181.3	7.63	
1014	0.45	—	20.15	2.700	3.96	6.83	-177.5	7.21	
1017	0.60	—	20.13	2.683	3.92	6.82	-169.0	7.22	
1021	0.70	—	20.12	2.650	3.87	6.80	-172.7	6.78	
1024	0.80	—	20.16	2.632	3.91	6.80	-178.2	5.12	
1027	0.90	—	20.17	2.622	3.82	6.81	-184.3	5.14	
1029	1.00	—	20.17	2.615	3.85	6.81	-180.0	5.16	
1029	START SAMPLE COLLECTION								
1037	END SAMPLE COLLECTION: 2 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-57-45
SAMPLE ID: 008

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 60's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition SEE MW-57-11
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

45 (DTB) - 4.5 (DTW) = 40.5 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 40.5 x 0.041 (Multiplier) = 1.66 (Well Volume) gal

1.66 x 1.5 = 2.49 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.65 gal

WATER QUALITY: DTW = 4.50 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1002	0	4.50	PUMP	ON					
1007	0.25	~~19.82~~	19.82	2.790	4.86	6.96	-183.2	0.94	
1011	0.45	—	19.94	2.756	2.90	10.98	7.4	0.86	
1014	0.55	—	19.97	2.754	2.70	7.02	2.5	1.90	
1020	0.75	—	20.02	2.755	2.53	7.09	-4.1	2.16	
1029	1.00	—	20.06	2.767	2.56	7.13	-8.9	0.61	
1032	1.25	—	20.13	2.767	2.52	7.14	-7.8	0.75	
1037	1.50	—	20.13	2.769	2.52	7.16	-11.4	0.56	
1042	1.75	—	20.15	2.766	2.53	7.17	-13.0	0.51	
1046	2.00	—	20.15	2.766	2.54	7.17	-13.9	0.50	
1049	2.25	—	20.15	2.766	2.51	7.18	-14.7	0.57	
1054	2.50	—	20.16	2.767	2.53	7.18	-15.9	0.62	
1055	START SAMPLE COLLECTION								
1103	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	10070429 3

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-58-26
SAMPLE ID: 012

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 50's

PROJECT NO: 01.0017869.92
DATE: 5/13/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.23 GW Elevation 8.000

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0907	18.925	PUMP ON							
0917	18.484	14.96	3.703	1.41	7.41	-131.2	2.59		0.05
0922	18.455	15.03	3.740	0.69	7.44	-135.0	1.92		0.14
0927	18.433	15.09	3.748	0.47	7.44	-136.8	0.61		0.24
0930	START	SAMPLE COLLECTION							
0958	END	"	"		IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No bolts

NOTES AND OBSERVATIONS: Total volume purged 0.39 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Purge water seems a little soapy (bubbles forming when exiting tubing cap)

WELL ID: MW-58-65
SAMPLE ID: 012

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy, 50's

PROJECT NO: 01.0017869.92
DATE: 5/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.68 GW Elevation 7.570

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0907	63.495	PUMP ON							
0917	63.344	15.29	1.111	1.03	7.05	-157.6	1.12		0.06
0922	63.349	15.34	1.119	0.62	7.16	-167.1	0.57		0.15
0927	63.334	15.41	1.121	0.60	7.23	-187.0	1.13		0.25
0933	63.354	15.58	1.122	0.46	7.30	-187.5	1.09		0.40
0938	63.341	15.66	1.119	0.37	7.30	-193.3	0.60		0.50
0943	63.392	15.77	1.107	0.32	7.35	-189.7	0.35		0.60
0945	START SAMPLE	COLLECTION							
1011	END	"	"	:32	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Fair, No bolts

NOTES AND OBSERVATIONS:

Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 60 - 35

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)
24.9 to 34.4

SAMPLING PORT
35 7

TOTAL VOLUME PURGED: 1.70 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0950	0	PUMP	ON					5/7	18
0957	0.1	12.39	4.004	2.66	6.39	161.2	1.00		
1002	0.28	12.75	4.100	1.77	6.56	139.4	0.89		
1007	0.45	12.65	4.132	1.41	6.70	124.3	0.94		
1018	0.71	12.85	4.068	1.30	6.91	110.6	0.74		
1023	0.80	13.07	3.980	2.23	6.97	107.6	1.04		
1028	0.88	13.11	3.885	2.85	7.02	105.6	0.88		
1034	1.00	13.24	3.756	3.40	7.05	104.5	1.04		
1039	1.10	13.37	3.680	3.78	7.08	103.8	1.15		
1044	1.20	13.63	3.562	4.15	7.07	103.9	1.16		
1049	1.30	13.74	3.499	4.44	7.10	103.3	1.26		
1055	1.40	13.83	3.390	4.80	6.97	102.0	0.04		
1100	1.48	13.96	3.280	4.91	6.95	103.6	0.57		
1105	1.55	14.10	3.213	5.08	6.95	104.0	0.53		
1106	START	SAMPLE	COLLECTION						
1136	END	"	"	:24	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	10070 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Very Poor
Lid broken off at hinge and partially sunken in. Needs to be replaced.

WELL ID: MW 60 - 53

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0950	0	PUMP	ON					5/7	18
0957	0.1	12.77	2.728	1.38	5.95	-23.5	1.68		
1002	0.25	12.82	2.769	1.24	6.01	-22.4	0.77		
1007	0.425	12.81	2.811	1.26	6.16	-6.6	0.54		
1018	0.85	12.86	2.846	1.35	6.46	-21.4	0.87		
1023	0.95	12.99	2.843	1.22	6.59	31.1	0.52		
1028	1.10	13.05	2.839	1.27	6.67	38.2	0.67		
1034	1.30	13.21	2.853	1.35	6.72	46.4	0.85		
1039	1.50	13.30	2.871	1.43	6.79	49.9	1.15		
1044	1.65	13.37	2.872	1.44	6.83	54.5	0.26		
1049	1.80	13.62	2.871	1.42	6.87	57.3	0.65		
1050	START	SAMPLE	COLLECTION						
1137	END	11	11	:	2L IPEC - ROUTINE				
	PUMP	OFF			2L IPEC - DUPLICATE				
					2L IPEC - SPIKE				
					2L IPEC - BLANK				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007 01 254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 72

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SL, AB

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 3.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	~~START~~	PUMP	ON				6/5	35
1235	1.0	13.93	3.654	1.07	7.05	53.7	1.13		
1245	1.75	14.20	3.355	0.61	7.21	62.1	0.97		
1250	2.00	14.23	3.294	0.56	7.22	64.0	1.21		
1255	2.50	14.17	3.277	0.55	7.27	64.3	1.04		
1300	2.85	14.26	3.257	0.51	7.28	65.6	1.16		
1304	START	SAMPLE	COLLECTION				"		
1312	END	"	"		2L IPEC				
1349	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 135

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

174.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 2.30 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/5	35
1235	0.5	13.78	2.247	0.29	6.40	-124.6	2.34		
1245	1.0	14.00	2.361	0.18	6.59	-116.0	0.69		
1250	1.25	14.00	2.312	0.15	6.62	-102.7	0.44		
1255	1.75	14.06	2.350	0.13	6.64	-93.3	0.55		
1300	2.10	14.08	2.395	0.13	6.66	-90.5	0.69		
1310	2.15	14.09	2.402	0.10	6.69	-87.4	0.06		
1315	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 154

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 55°

PROJECT NO: 01.0017869.92
DATE: 4/15/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154 2

TOTAL VOLUME PURGED: 2.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/5	35
1235	0.5	13.98	2.047	0.44	6.98	-45.7	0.60		
1245	1.0	14.20	2.105	0.26	7.10	-42.0	0.54		
1250	1.3	14.26	2.132	0.22	7.13	-54.4	0.13		
1255	1.7	14.27	2.145	0.19	7.14	-59.6	0.13		
1300	1.90	14.25	2.148	0.16	7.15	-63.3	0.35		
1304	START	SAMPLE COLLECTION							
1319	END	"	"		2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition See MW60-35

WELL ID: MW 60 - 176

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy

PROJECT NO: 01.0017869.92
DATE: 4/15/14
SAMPLER(S): SL, OB

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

SAMPLING PORT

176

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1220	0	PUMP	ON					6/5	35
1235	0.25	14.12	0.741	3.02	5.26	-110.6	1.82		
1245	0.60	14.66	0.744	0.90	5.33	-135.9	2.49		
1250	0.80	14.68	0.746	0.56	5.50	-150.7	0.84		
1255	1.00	14.77	0.748	0.42	5.66	-179.9	1.38		
1300	1.10	14.75	0.749	0.32	5.85	-206.6	0.58		
1310	1.25	14.76	0.750	0.26	6.02	-221.8	0.76		
1315	1.50	14.63	0.751	0.24	6.03	-226.6	1.00		
1320	1.75	14.55	0.750	0.22	6.10	-231.2	0.87		
1322	START SAMPLE COLLECTION								
	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW-62-18
SAMPLE ID: ~~DUP~~ 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45, DRIZZLE

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.91 GW Elevation 2.90

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1056	6.114	PUMP	ON						gal
1604	6.045	8.77	2.340	7.51	6.21	229.8	2.11		0.05
1110	6.014	8.80	2.334	~~7.50~~	6.50	219.4	1.32		0.20
1115	5.983	8.82	2.338	7.52	6.67	210.6	1.15		0.30
1120	5.946	8.85	2.341	7.63	6.79	205.0	1.01		0.45
1125	5.905	8.91	2.355	7.79	6.91	202.0	0.92		0.60
1130	5.389	8.91	3.360	7.83	6.96	200.0	0.63		0.75
1135	5.342	8.91	2.369	7.86	6.99	197.2	0.51		0.90
1136	START SAMPLE COLLECTION								
1153	END SAMPLE COLLECTION				2.139	80			
1210	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	3
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.05 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-62-37
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45, DRIZZLE

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): GB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW ~~10.60~~ 10.24 GW Elevation 2.60

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1056	12.151	PUMP ON							
1104	12.009	10.11	1.567	3.33	4.94	327.8	0.67		0.01
1110	11.973	10.53	1.548	~~4.573~~	4.98	174.5	0.28		0.20
1115	11.942	10.96	1.539	1.34	5.09	149.1	0.00		0.30
1120	11.912	11.31	1.535	1.05	5.19	124.1	0.00		0.40
1125	11.890	11.47	1.534	1.09	5.29	87.3	0.00		0.50
1130	11.891	11.40	1.538	0.99	5.37	31.3	0.00		0.60
1135	11.876	11.33	1.536	0.87	5.46	-16.5	0.00		0.70
1140	11.830	11.24	1.535	0.76	5.56	-51.3	0.00		0.80
1145	11.829	11.22	1.535	0.76	5.60	-61.5	0.00		0.90
1150	11.812	11.15	1.535	0.77	5.66	-67.1	0.00		1.05
1151	START	SAMPLE COLLECTION							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	4
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 1.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 62 - 53

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					5/6	25
1017	0.1	10.89	1.404	2.67	6.47	-41.4	1.03		
1022	0.2	10.93	1.403	1.99	6.54	-42.3	1.35		
1027	0.3	10.64	1.402	1.17	6.66	-41.2	1.72		
1032	0.4	10.47	1.402	0.85	6.73	-40.5	0.73		
1037	0.45	10.33	1.401	0.70	6.79	-39.4			
1042	0.50	10.19	1.400	0.64	6.82	-39.1			
1043	START	SAMPLE	COLLECTION						
1132	END	"	"	: 2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 62-71

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 82.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: _____ gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					5/6	25
1017	0.20	10.95	1.373	1.78	5.72	-88.7	0.10		
1022	0.35	11.37	1.363	0.89	5.88	-87.7	0.14		
1027	0.50	11.76	1.360	0.67	6.05	-84.4	0.27		
1032	0.80	11.89	1.360	0.60	6.15	-84.2	0.00		
1037	1.00	12.04	1.356	0.54	6.24	-84.4			
1042	1.15	12.20	1.354	0.52	6.31	-88.7			
1049	1.40	12.32	1.354	0.51	6.36	-73.2			
1054	1.60	12.51	1.352	0.47	6.43	-73.5			
1059	1.75	12.69	1.350	0.48	6.47	-63.3			
1100	START	SAMPLE	CONTI	TIDE					
1115	END	"	"	:24	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 62 - 92

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					5/6	35
1017	0.1	10.40	1.353	2.70	6.47	-32.7	0.25		
1022	0.2	10.74	1.347	1.38	6.83	-25.5	0.00		
1027	0.4	10.15	1.348	0.77	7.10	-14.0	0.00		
1032	0.6	11.34	1.349	0.52	7.18	-2.8	0.00		
1037	0.75	11.53	1.349	0.41	7.22	-0.5			
1042	0.95	11.73	1.351	0.32	7.23	-0.1			
1045	START	SAMPLE	COLLECTION						
1103	END	"	"	"	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070 1354

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 62 - 138

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/14
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1330	0	Pump	ON					6/4	30
1342	0.01	10.107	1.437	4.65	6.75	-60.7	to high		
1350	0.20	11.38	1.4105	1.08	6.92	-106.4	0.20		
1355	0.36	11.68	1.468	0.107	6.99	-88.2	0.14		
1400	0.55	11.82	1.471	0.48	7.05	-60.4	0.07		
1405	0.70	11.94	1.472	0.40	7.07	-49.3	0.00		
1410	0.82	12.02	1.472	0.37	7.09	-39.9	0.00		
1415	1.05	12.20	1.470	0.34	7.11	-33.1	0.00		
1420	1.20	12.23	1.470	0.32	7.13	-29.7	0.00		
1422	START SAMPLE COLLECTION								
1439	END SAMPLE COLLECTION: 2L JPEL								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 62 - 182

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 45° Drizzle

PROJECT NO: 01.0017869.92
DATE: 4/13/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1336	0	PUMP	ON					6/4	30
1342	0.01	10.46	1.247	5.23	6.18	-85.4	0.21		
1350	0.15	10.86	1.272	2.05	6.29	-131.4	0.00		
1355	0.28	11.17	1.274	1.38	6.39	-143.3	0.00		
1400	0.40	11.36	1.276	0.96	6.46	-135.8	0.00		
1405	0.52	11.51	1.277	0.685	6.50	-126.5	0.00		
1410	0.65	11.65	1.278	0.53	6.53	-118.3	0.00		
1415	0.75	11.76	1.279	0.48	6.56	-111.5	0.00		
1420	0.85	11.82	1.280	0.42	6.57	-108.7	0.00		
1427	START SAMPLE COLLECTION								
1444	END SAMPLE COLLECTION 2L JPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW-63-18
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 1.245 GW Elevation 0.609

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes Gal
0905	4.850	PUMP	ON						0
0915	4.895	9.78	2.629	3.91	6.56	-28.4	2.14		0.03
0920	4.919	9.80	2.642	2.14	6.65	-53.5	0.79		0.09
0925	4.950	9.86	2.617	1.31	6.72	-61.9	0.37		0.19
0930	4.996	9.84	2.58	0.89	6.76	-67.4	0.28		0.28
0935	5.061	9.88	2.48	0.95	6.79	-69.5	0.54		0.38
0940	5.107	9.88	2.181	0.92	6.83	-70.8	0.48		0.50
0945	5.186	9.88	2.053	0.85	6.85	-71.4	0.47		0.58
0950	5.241	9.81	1.977	0.78	6.85	-72.3	0.88		0.65
0955	5.286	9.82	1.939	0.74	6.88	-75.3	0.71		0.72
1000	5.318	9.81	1.894	0.68	6.89	-76.3	0.54		0.80
1005	START	SAMPLE COLLECTION							
1035	END	"	"		6.2	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	2
turbidity meter	10070 4393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-63-34
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast 45°

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.23 GW Elevation 0.829

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									1gal
0905	12.540	PUMP	ON						0
0915	12.548	10.64	1.356	3.32	6.39	7.4	1.49		0.03
0920	12.570	10.76	1.347	3.08	6.38	-40.0	0.99		0.09
0925	12.597	10.81	1.340	2.74	6.46	-63.9	0.77		0.14
0930	12.630	10.86	1.336	2.00	6.53	-82.0	0.28		0.28
0935	12.669	11.02	1.331	1.61	6.59	-93.6	0.32		0.38
0940	12.734	11.03	1.331	1.12	6.63	-95.1	0.39		0.50
0945	12.765	10.97	1.332	0.86	6.66	-97.4	0.62		0.57
0946	START	SAMPLE COLLECTION							
1035	END	"	"		3L IPE0				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	2
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.72 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 63 - 50

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7/7.4	20
1032	0.05	11.93	1.089	5.04	5.68	78.2	—		
1040	0.15	12.67	1.069	2.26	6.13	-52.4	1.55		
1045	0.25	12.81	1.070	1.85	6.34	-55.1	1.04		
1050	0.50	12.91	1.073	1.56	5.99	-53.0	0.86		
1055	0.75	13.03	1.080	1.40	6.38	-54.3	0.89		
1100	1.00	13.11	1.087	1.30	6.42	-53.7	0.92		
1105	1.25	13.11	1.092	1.29	6.40	-52.4	0.85		
1110	1.50	13.10	1.093	1.29	6.39	-53.7	0.81		
1111	START SAMPLE COLLECTION								
1125	END SAMPLE COLLECTION; PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10070125 54

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 63 - 93

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5

TOTAL VOLUME PURGED: 0.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7/7	20
1034	0.01	11.20	0.825	1.58	6.73	-88.5			
1040	0.10	11.60	0.876	0.37	6.90	-88.2	1.49		
1045	0.25	11.77	0.987	0.18	7.02	-93.7	1.53		
1050	0.35	11.85	1.043	0.15	7.10	-87.5	1.09		
1055	0.45	12.00	1.056	0.13	7.16	-84.7	0.90		
1100	0.65	12.10	1.070	0.11	7.21	-81.8	0.85		
1105	0.70	12.08	1.072	0.10	7.23	-79.2	0.79		
1105	START SAMPLE COLLECTION								
1127	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 63 - 112

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112

4

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1025	0	PUMP	ON					7/7.4	20
1032	0.01	11.29	1.210	3.12	8.07	-65.3	—		
1040	0.15	11.65	1.192	0.85	7.24	-88.5	2.05		
1045	0.30	11.91	1.197	0.54	7.27	-95.2	1.77		
1050	0.40	12.00	1.206	0.44	7.28	-97.7	1.31		
1055	0.50	12.17	1.214	0.36	7.29	-90.6	1.39		
1100	0.60	12.26	1.218	0.31	7.31	-90.7	1.29		
1102	START	STAMP	LE COLLECTION!						
1125	END SAMPLE PUMP	COLLECTION: 2 OFF		IPEC					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 63 - 121

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, JL

SAMPLING INTERVAL (depth in ft below top of casing)

18 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP ON						3/3.2	35
0910	0.01	11.54	1.290	2.23	6.58	-151.7	0.99		
0915	0.40	12.34	1.292	0.96	5.80	-116.2	1.12		
0920	0.50	12.43	1.304	0.85	5.93	-101.1	1.00		
0925	0.75	12.58	1.313	0.82	5.95	-90.9	0.70		
0930	1.00	12.76	1.315	0.78	5.98	-91.4	0.90		
0935	1.25	12.86	1.318	0.77	6.01	-86.6	0.63		
0940	1.50	12.93	1.321	0.76	6.02	-82.5	0.82	↓	↓
0941	START	SAMPLE COLLECTION							
0954	END SAMPLE COLLECTION: 2L IP EC								
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10070125Y

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 63 - 163

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST 145° WIND 4

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 1.00 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					8/8 2	35
0906	0.05	11.11	1.055	1.46	6.63	-95.1	2.82		
0915	0.35	11.83	1.008	~~0.41~~ 0.12	~~6.91~~ 6.96	-103.0	1.52		
0920	0.50	12.01	1.009	0.15	6.94	-105.7	0.66		
0925	0.60	12.20	1.014	0.12	6.97	-107.8	1.04		
0930	0.75	12.35	1.018	0.10	6.99	-108.4	0.82		
0933	START	SAMPLE COLLECTION							
0949	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 63 - 174

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 45°, WINDY

PROJECT NO: 01.0017869.92
DATE: 4/19/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174 1

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					8/8.2	35
0906	0.01	11.26	1.001	3.32	7.03	68.6	6.33		
0915	0.40	12.11	0.943	0.56	7.21	-55.6	2.03		
0920	0.55	12.27	0.941	0.48	7.21	-52.7	1.73		
0925	0.75	12.47	0.942	0.40	7.21	-48.5	1.28		
0930	0.90	12.63	0.950	0.37	7.21	-48.1	1.02		
0935	1.00	12.78	0.956	0.34	7.22	-45.6	0.98		
0937	START SAMPLE COLLECTION								
0952	END SAMPLE COLLECTION: 2 IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070123 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-66-21
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60°

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): SC, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.61 GW Elevation 2.797

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1031	9.573	PUMP	ON						
1045	9.591	12.61	1.341	2.41	5.74	-44.9			
1050	STOPPED	PUMP	FLOW METER	CLOGGED					
1056	STARTED	PUMP							
1100	9.558	12.37	1.260	2.62	5.89	-39.0	71.72		0.17
1105	9.474	13.44	1.191	1.96	5.91	-43.8			0.30
1110	9.454	13.01	1.180	1.83	5.86	-41.6			0.23
1117	9.395	14.18	1.152	1.87	6.04	-48.1	53.60		0.30
1122	9.371	13.31	1.153	2.18	6.38	-54.4	39.50		0.33
1127	9.371	13.40	1.131	1.88	6.41	-59.9	11.49		0.40
1132	9.305	13.48	1.129	1.82	6.42	-59.4	12.03		0.44
1137	9.266	13.89	1.125	1.71	6.45	-56.3	23.18		0.50
1142	9.232	14.26	1.124	1.65	6.47	-50.9	9.86		0.54
1147	9.200	14.77	1.122	1.55	6.53	-48.2	12.30		0.58
1152	9.163	15.16	1.123	1.80	6.57	-46.7	12.50		0.62
1157	9.091	16.11	1.124	1.55	6.69	-55.2	13.70		0.70
1207	9.057	15.41	1.140	1.59	6.76	-57.9	10.98		0.75
1212	9.026	15.09	1.134	1.43	6.78	-55.6	9.64		0.80
1213	START	SAMPLE COLLECTION							
1345	END	"	"		:2L	IPE			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	2
turbidity meter	2007 04293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dead

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-66-36
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 60°

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.66 GW Elevation 2.704

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1031	13.505	PUMP ON							
1045	13.312	13.67	2.608	3.13	6.62	-24.4			
1050	STOPPED	PUMP	FLOW METER	CLOGGED					
1056	STARTED	PUMP							
1100	13.228	13.70	3.082	0.93	6.93	-51.1	2.80		0.24
1105	13.240	13.89	3.100	0.79	6.97	-54.5			0.30
1110	13.205	13.88	3.112	0.74	7.00	-57.9			
1117	13.195	14.48	3.106	0.68	7.06	-61.1	1.79		0.45
1122	13.163	14.31	3.116	0.69	7.06	-61.1	1.51		0.50
1127	13.130	14.54	3.102	0.68	7.08	-61.9	1.05		0.58
1132	13.119	14.67	3.101	0.68	7.10	-62.6	1.15		0.60
1137	13.072	14.56	3.110	0.65	7.11	-62.2	0.93		0.68
1142	13.045	14.72	3.095	0.57	7.12	-62.5	0.44		0.73
1147	13.018	14.92	3.098	0.53	7.14	-63.0	1.21		0.78
1152	12.989	15.05	3.103	0.52	7.15	-63.6	1.27		0.83
1157	START	SAMPLE COLLECTION							
1253	END	"	"		2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	4
turbidity meter	700704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 67 - 39

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

38.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP ON						8/8	20
1236	0.01	18.49	2.959	3.25	6.40	-30.2	—		
1250	0.75	18.161	2.800	0.35	7.42	-45.9	1.00		
1255	1.00	18.169	2.788	0.35	7.45	-48.8	1.66		
1300	1.25	18.171	2.777	0.32	7.46	-50.5	1.74		
1305	1.45	18.162	2.779	0.31	7.47	-51.7	0.89		
1310	1.60	18.167	2.775	0.30	7.47	-54.7	0.63		
1313	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION: 2L IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007012541

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67 - 105

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50s

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	PUMP	ON					8/8	20
1238	0.01	18.58	1.594	3.17	6.30	-79.2	—	↓	↓
1250	0.50	18.85	1.567	0.40	6.43	-135.7	3.04		
1255	0.60	18.87	1.562	0.26	6.48	-110.7	2.34		
1300	0.75	18.79	1.563	0.18	6.52	-120.6	1.90		
1305	0.85	18.79	1.570	0.14	6.56	-143.1	1.67		
1310	1.00	18.72	1.575	0.12	6.60	-126.5	1.45		
1315	1.10	18.66	1.574	0.11	6.61	-126.7	1.25		
1320	1.25	18.75	1.573	0.10	6.64	-107.8	1.35	↓	↓
1325	START SAMPLE COLLECTION								
1343	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67 - 173

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 189.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1233	0	Pump	ON					8/8	20
1240	0.01	18.07	1.115	4.51	10.51	-51.0	—		
1250	0.50	18.43	1.166	0.53	10.35	-132.7	4.04		
1255	0.60	18.52	1.214	0.38	6.45	-197.6	3.09		
1300	0.88	18.55	1.215	0.34	6.48	-221.7	3.12		
1305	0.75	18.64	1.209	0.31	6.51	-229.0	2.89		
1310	0.85	18.55	1.199	0.27	10.51	-238.2	2.60		
1315	0.95	18.49	1.183	0.26	6.50	-242.1	2.66		
1320	1.00	18.44	1.170	0.23	6.58	-250.1	2.31		
1325	1.05	18.62	1.161	0.20	6.56	-255.3	2.19		
1330	1.15	18.79	1.153	0.19	6.58	-245.1	2.07		
1335	1.20	18.72	1.130	0.19	6.59	-260.2	1.89		
1340	1.25	18.79	1.127	0.21	6.62	-263.7	1.75		
1345	1.30	18.75	1.115	0.18	6.62	-265.7	1.64	↓	↓
1349	START SAMPLE COLLECTION								
1409	END SAMPLE COLLECTION: 2L TPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2007 D1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR

MISSING MANIFOLD

WELL ID: MW 67 - 219

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.5

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON					6/6	50
1005	0.15	14.91	1.157	0.26	6.42	-210.2	0.78		
1015	0.25	15.72	1.154	0.07	6.80	-220.5	0.37		
1020	0.85	15.83	1.155	0.05	6.93	-219.6	0.20		
1025	1.25	15.76	1.157	0.04	6.96	-220.6	0.12		
1030	1.75	15.74	1.157	0.05	6.98	-220.7	0.53		
1035	2.00	15.72	1.155	0.06	7.00	-219.5	0.39		
1038	START SAMPLE COLLECTION								
1049	END SAMPLE COLLECTION: 2L TPH								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	2007 01 254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67-276

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON	1.20				6/6	50
1005	0.10	14.57	0.956	~~6.105~~	6.68	-63.2	1.10		
1015	0.25	15.61	0.944	0.39	7.06	-83.5	4.97		
1020	0.50	15.73	0.946	0.28	7.12	-45.8	0.94		
1025	0.75	15.68	0.946	0.23	7.14	-35.5	0.61		
1030	1.00	15.66	0.944	0.20	7.16	-36.4	0.78		
1035	1.25	15.66	0.942	0.18	7.16	-34.3	0.65		
1039	START SAMPLE COLLECTION								
1053	END SAMPLE COLLECTION. 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2007042534

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67 - 323

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50's

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 2.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON					6/6	50
1005	0.01	13.67	0.843	6.84	5.53	13.7	2.25		
1015	0.15	14.93	0.790	1.04	6.00	-62.4	1.70		
1020	0.25	15.23	0.788	0.60	6.20	-81.7	3.32		
1025	0.50	15.27	0.794	0.43	6.30	-122.7	3.54		
1030	0.75	15.28	0.801	0.31	6.36	-131.0	1.60		
1035	0.95	15.36	0.802	0.22	6.41	-169.9	1.12		
1040	1.25	15.34	0.803	0.12	6.49	-190.0	0.98		
1045	1.50	15.42	0.802	0.11	6.51	-164.8	0.65		
1100	1.75	15.44	0.802	0.11	6.52	-163.7	0.54		
1105	1.95	15.76	0.809	0.09	6.55	-210.1	1.20		
1110	1.98	15.78	0.811	0.08	6.56	-218.9	1.07		
1115	2.05	15.86	0.809	0.06	6.59	-220.1	0.95		
1117	START SAMPLE COLLECTION								
1133	END SAMPLE COLLECTION								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	2007012S4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
MISSING MANIFOLD

WELL ID: MW 67 - 340

SAMPLE ID: 016

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 50'S

PROJECT NO: 01.0017869.92
DATE: 4/14/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

335.3 to 347.9

SAMPLING PORT

340 1

TOTAL VOLUME PURGED: 1.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	0	PUMP	ON					6/6	50
1005	0.01	13.73	0.720	4.13	6.46	-72.3	1.69		
1015	0.10	15.03	0.756	0.60	6.60	-77.4	1.94		
1020	0.25	15.30	0.750	0.46	6.77	-133.5	0.54		
1025	0.50	15.33	0.748	0.33	6.86	-148.1	0.63		
1030	0.75	15.26	0.748	0.31	6.90	-149.1	0.25		
1035	1.00	15.27	0.749	0.28	6.94	-151.0	0.17		
1040	1.25	15.24	0.754	0.25	6.97	-166.8	0.12		
1045	1.50	15.33	0.754	0.23	6.97	-169.4	0.06		
1100	1.75	15.32	0.754	0.23	6.98	-176.2	0.00		
1102	START SAMPLE COLLECTION								
1117	END SAMPLE COLLECTION : 2L ZAEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	2W701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR

MISSING MANIFOLD

WELL ID: MW-107
SAMPLE ID: DUP

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 50's

PROJECT NO: 01.0017869.92
DATE: 5/2/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 21.98 GW Elevation 120.777

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
0824	-6.704	PUMP ON						6/8.4	32	0
0830	-6.704	10.86	4.006	0.25	6.11	118.9	2.09			0.25
0835	-6.704	10.78	3.877	0.25	6.13	109.6	0.77			0.60
0840	-6.704	10.72	3.571	0.26	6.23	105.8	1.15			0.90
0845	-6.704	10.70	3.593	0.26	6.18	103.8	0.26			1.20
0850	-6.704	10.71	3.681	0.30	6.18	102.0	0.51			1.50
0855	-6.704	10.73	3.764	0.23	6.16	100.4	0.63			1.75
0900	-6.704	10.75	3.878	0.25	6.20	99.1	0.33			2.00
0905	-6.704	10.76	3.950	0.24	6.14	98.2	0.22			2.25
0910	-6.705	10.79	3.989	0.21	6.15	97.2	0.11			2.50
0915	-6.705	10.78	4.016	0.19	6.19	96.6	0.36			2.80
0916	START SAMPLE COLLECTION									
0925	END	"	"	2L	IPEC					
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070B1254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Stickup in Flood Cond.

NOTES AND OBSERVATIONS: GW elevation negative even after transducer reset. Total volume purged 2.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-CSS
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain 50's

PROJECT NO: 01.0017869.92
DATE: 5/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 1.44 GW Elevation 18.633

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1213	12.738	PUMP ON							0
1223	12.577	17.66	2.245	4.86	malfunction	81.1			0.08
1228	12.443	17.70	2.303	4.93		97.2	3.86		0.15
1233	12.348	17.71	2.360	5.02		124.8	2.49		0.21
1238	12.332	17.74	2.379	5.06		163.5	1.96		0.32
1243	12.296	17.76	2.384	5.10		198.9	2.29		0.42
1248	12.268	17.78	2.385	5.09		215.9	0.76		0.52
1253	12.231	17.78	2.385	5.17		213.6	1.00		0.62
1258	12.204	17.78	2.384	5.11		211.7	0.94		0.72
1258	START SAMPLE COLLECTION								
1324	END SAMPLE COLLECTION: 2 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good (stickup)

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: U3-4D
SAMPLE ID: 028

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 60's

PROJECT NO: 01.0017869.92
DATE: 4/25/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Fair, bolts stripped
Well Diameter: 4 in

WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 9.89 (DTW) = 17.36 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.36 x 0.653 (Multiplier) = 11.336 (Well Volume) gal

11.336 x 1.5 = 17.0 gal (Designed Purge Volume)

TOTAL VOLUME PURGED: 8.25 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1238	0	51.510	PUMP ON						
1245	0.5	50.846	20.99	1.646	4.21	7.65	119.4	1.58	
1305	3.0	46.901	22.05	1.635	3.67	7.87	101.4	1.34	
1318	4.75	42.958	22.20	1.635	3.69	7.88	87.0	1.36	
1322	6.00	40.399	22.27	1.635	3.82	7.86	77.9	1.83	
1340	7.50	35.947	22.52	1.635	3.84	7.85	68.6	1.44	
1344	7.75	35.248	22.68	1.635	3.55	7.86	65.3	1.15	
1348	8.00	34.675	22.82	1.632	3.65	7.85	62.8		
1349	8.10	34.672	PUMP	OFF - Well dry; Well let well recharge.					
1424		START	SAMPLE	COLLECTION					
1450		END	"	"	:2L IPEC				
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125V

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-45
SAMPLE ID: 003

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Overcast, 60's

PROJECT NO: 01.0017869.92
DATE: 4/25/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1238	9.21	PUMP	ON						
1246	9.24	19.79	0.951	1.30	7.40	160.4	1.12		0.03
1305	9.25	19.50	0.906	0.76	7.04	99.2	1.03		0.33
1310	9.25	19.65	0.905	0.47	6.93	71.3	0.87		0.43
1315	9.25	19.52	0.905	0.63	6.85	56.7	0.74		0.65
1320	9.25	20.74	0.903	0.43	6.89	42.6	1.04		0.80
1325	9.25	21.18	0.900	0.44	6.88	34.7	0.69		0.88
1330	9.26	21.39	0.898	0.43	6.85	24.6	0.74		1.00
1335	9.26	21.46	0.895	0.41	6.81	15.4	0.58		1.10
1340	9.26	21.42	0.895	0.42	6.78	9.3	0.75		1.25
1345	9.26	21.40	0.894	0.46	6.75	2.6	0.83		1.38
1350	9.26	21.53	0.893	0.44	6.71	-11.8	0.59		1.55
1355	9.26	21.53	0.892	0.45	6.71	-12.1	0.45		1.68
1400	9.26	21.48	0.892	0.46	6.70	-15.4	0.43		1.75
1400	START SAMPLE COLLECTION								
1413	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	2
turbidity meter	20070 1754

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, bolts stripped

NOTES AND OBSERVATIONS: Total volume purged 0.90 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: U3-T1
SAMPLE ID: 032

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50's

PROJECT NO: 01.0017869.92
DATE: 5/6/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.91 GW Elevation 4.608

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0920	3.072	PUMP	ON						0
0935	3.059	16.09	1.007	2.58	7.42	185.0	0.45		0.13
0940	3.058	16.55	0.999	2.10	7.48	173.1	0.04		0.28
0945	3.052	16.79	0.985	1.66	7.50	166.9	0.06		0.46
0950	3.052	16.89	0.983	1.43	7.51	163.4	0.35		0.60
0955	3.048	16.97	0.984	1.12	7.52	163.2	0.05		0.73
1000	3.046	17.12	0.982	0.99	7.53	165.3	0.05		0.84
1005	3.045	17.21	0.982	0.80	7.53	165.6	0.06		0.95
1020	START	SAMPLE	COLLECTION						
1023	END	"	"		IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	3
turbidity meter	20070493

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.10 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-T2
SAMPLE ID: ~~036~~ 037

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 50's

PROJECT NO: 01.0017869.92
DATE: 5/6/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.81 ~~GW Elevation~~ ACTUAL DEPTH = 28.66

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1038	2.854	PUMP ON							0
1047	2.811	21.21	1.395	3.06	7.33	-61.0	3.94		0.01
1052	2.810	21.30	1.393	2.49	7.60	-88.4	11.38		0.15
1057	2.815	21.66	1.384	1.94	7.72	-123.8	2.15		0.32
1102	2.819	21.77	1.389	1.77	7.77	-120.7	2.30		0.48
1107	2.818	22.01	1.384	1.68	7.82	-125.6	2.17		0.62
1112	2.817	22.14	1.383	1.06	7.85	-119.5	0.78		0.85
1117	2.813	22.22	1.381	1.04	7.86	-119.6	0.73		0.95
1122	2.810	22.27	1.384	0.98	7.87	-120.8	0.68		1.20
1124	START SAMPLE COLLECTION								
1141	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	2
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

APPENDIX D: Q3-2011 SAMPLING DATA SHEETS

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: I-2
SAMPLE ID: 003

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80s

PROJECT NO: 01.0017869.92
DATE: 8/12/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

40.13 (DTB) - 27.97 (DTW) = 12.16 **Well Column Height** ft

Well Vault Condition Good
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 12.16 x 0.163 **Multiplier** = 1.982 **Well Volume** gal

1.982 x 1.5 = 2.97 **Designed Purge Volume** gal

TOTAL VOLUME PURGED: gal

WATER QUALITY: DTW = 27.97 GW Elevation = 54.76 ACTUAL DEPTH = 44.812

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1322	0	44.812	PUMP	ON					
1328	0.02	44.793	19.14	0.873	MALFUNC.	7.12	71.2	1.76	
1338	0.34	43.982	18.10	0.813		7.34	62.2	0.81	
1343	0.50	43.982	18.04	0.817		7.14	53.0	0.47	
1353	0.85	43.982	17.92	0.814		7.05	59.4	0.64	
1403	1.18	43.994	18.07	0.814		6.95	73.9	1.07	
1413	1.50	44.000	17.90	0.815		6.95	80.5	1.68	
1423	1.84	44.000	17.82	0.819		6.94	57.3	1.50	
1433	2.18	44.000	17.92	0.819		7.04	41.4	1.58	
1443	2.39	44.006	17.86	0.819		7.09	32.6	1.04	
1448	2.77	44.000	17.78	0.821		7.15	21.7	0.68	
1458	3.00	44.000	17.65	0.823		7.16	13.3	0.73	
1459	START	SAMPLE	COLLECTION						
1513	END	"	"	: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.
Used one peristaltic pump through all three heads.

WELL ID: MW 30 - 84

SAMPLE ID: 032

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/9/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP ON						6/12	40
1015	0.01	28.51	1.936	2.88	6.81	50.7	—	↓	↓
1020	0.05	28.61	1.929	2.49	6.89	57.6	—		
1025	0.10	28.65	1.928	2.20	6.94	51.6	—		
1030	0.15	28.67	1.926	2.08	6.98	50.7	—		
1035	0.20	28.67	1.924	1.99	7.00	50.1	—		
1040	0.25	28.67	1.924	1.90	7.02	49.6	—	↓	↓
1041	START SAMPLE COLLECTION								
1116	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR

WELL ID: MW 30 - 69

SAMPLE ID: 041

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/9/11
SAMPLER(S): CB, SC

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 0.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1005	0	PUMP	ON					6/12	40
1010	0.05	27.72	1.390	8.80	7.52	27.7	—	↓	↓
1015	0.20	27.62	1.377	9.13	7.74	12.8	—		
1020	0.35	27.45	1.356	9.48	7.85	8.6	—		
1025	0.50	27.30	1.359	9.60	7.91	7.1	—		
1030	0.65	27.20	1.360	9.51	7.93	6.1	—		
1031	START SAMPLE COLLECTION								
1049	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR

WELL ID: MW 31 - 49

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 1.69 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					6/7	29
1015	0.26	20.42	2.261	2.63	6.96	13.6	5.87	↓	↓
1020	0.59	20.10	2.176	2.86	7.05	21.6	1.99		
1025	0.88	19.95	2.009	4.44	7.12	27.4	1.53		
1030	1.20	19.81	1.969	4.63	7.12	31.6	1.05		
1035	1.54	19.72	1.954	4.73	7.13	33.6	1.59		
1038	START	SAMPLE	COLLECTION						
1047	END PUMP	OFF	"	"	: 2L	IPEC			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good, but heavy water intrusion above waterloo manifold, bailed out to ground. No water needed to be added to packer.

WELL ID: MW-31 - 63

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 1.16 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1000	PUMP	ON						6/7	29
1015	0.01	22.95	1.857	0.53	7.12	-74.8	1.22		
1020	0.09	22.23	1.807	0.39	7.22	-56.2	0.86		
1025	0.18	21.86	1.750	1.96	7.28	-23.4	0.38		
1030	0.28	21.68	1.730	2.45	7.32	-1.5	0.18		
1035	0.39	21.43	1.672	2.75	7.37	7.6	0.33		
1040	0.51	21.37	1.627	2.70	7.39	11.6	0.38		
1045	0.64	21.54	1.604	2.69	7.41	13.1	0.73		
1050	0.78	21.35	1.585	2.69	7.44	11.9	0.53		
1055	0.87	21.28	1.588	2.57	7.44	11.7	0.79		
1100	0.94	21.15	1.604	2.60	7.45	45.0	0.47		
1105	1.01	21.13	1.622	2.57	7.46	39.8	0.99		
1107	START	SAMPLE	COLLECTION						
1127	END	"	"	: 2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
turbidity meter	20070404293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition See MW-31-49

WELL ID: MW 31 - 85

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)
69.8 to 85.4

SAMPLING PORT
85

TOTAL VOLUME PURGED: 1.46 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1008	0	PUMP	ON					6/7	29
1015	0.03	22.46	1.797	0.59	6.93	-173.8	2.47		
1020	0.18	21.88	1.833	2.67	6.94	-98.2	1.03		
1025	0.31	21.59	1.892	3.12	6.97	-75.2	1.00		
1030	0.42	21.50	1.897	3.19	6.98	-63.7	0.61		
1035	0.57	21.28	1.862	3.23	6.99	-58.2	0.68		
1040	0.71	21.21	1.834	3.33	6.99	-55.2	1.03		
1045	0.83	21.41	1.928	3.57	7.01	-54.7	1.50		
1050	0.93	21.28	1.978	3.36	7.03	-52.4	1.39		
1055	1.03	21.16	1.821	3.41	7.03	-48.7	1.72		
1100	1.18	21.08	1.813	3.42	7.02	-46.2	1.79		
1105	1.31	21.14	1.984	3.48	7.03	-43.2	1.05		
1108	START	SAMPLE	COLLECTION						
1129	END PUMP	" OFF	"	: 2L	IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20704297

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition see MW-31-49

WELL ID: MW 32 - 59

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

20.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1200	0	PUMP	ON					8/11	40
1205	0.25	21.12	1.101	5.32	7.01	36.7	3.12		
1210	0.50	20.82	1.125	5.52	7.08	35.2	2.69		
1215	1.00	20.88	1.127	5.44	7.12	33.2	2.48		
1220	1.25	20.79	1.130	5.54	7.15	32.6	2.51		
1222	START SAMPLE COLLECTION								
1230	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-32-19D

WELL ID: MW 32 - 85

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85 5

TOTAL VOLUME PURGED: 0.185 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1200	0	PUMP	ON					8/11	40
1205	0.01	23.53	1.766	6.71	7.11	-75.6	2.34		
1210	0.05	23.91	1.765	5.85	6.76	-58.1	2.14		
1215	0.10	24.14	1.765	5.50	6.74	-50.2	1.89		
1220	0.20	24.24	1.765	4.60	6.73	-34.1	1.29		
1225	0.25	24.19	1.765	3.108	6.74	-20.1	1.33		
1230	0.30	24.34	1.765	2.77	6.75	-16.8	1.25		
1235	0.38	24.12	1.773	2.45	6.77	-7.2	1.01		
1240	0.45	24.08	1.768	1.80	6.77	-4.3	0.80		
1245	0.50	24.05	1.772	1.40	6.75	-1.0	0.87		
1250	0.60	24.04	1.789	1.18	6.75	-2.3	0.83		
1255	0.68	23.97	1.793	1.08	6.77	-2.7	0.85		
1300	0.75	24.02	1.795	1.02	6.80	-1.7	0.84		
1301	START SAMPLE COLLECTION								
1336	END SAMPLE COLLECTION! 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 149

SAMPLE ID: 027

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	58
1024	0.10	22.34	2.617	1.14	6.43	-100.2	3.81		
1029	0.25	21.72	2.632	0.71	6.54	-95.6	1.83		
1034	0.38	21.34	2.648	0.53	6.57	-84.1	1.74		
1039	0.50	21.21	2.651	0.50	6.69	-80.9	1.78		
1044	0.75	21.32	2.646	0.46	6.73	-76.4	1.62		
1049	0.80	21.16	2.643	0.44	6.75	-75.3	1.65		
1053	START SAMPLE COLLECTION								
1110	END SAMPLE COLLECTION. 2L IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070121254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-PP

WELL ID: MW 32 - 173

SAMPLE ID: 025

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	58
1024	0.10	21.34	2.403	0.84	6.77	-143.6	1.06		
1029	0.30	20.96	2.418	0.100	6.43	-89.6	0.38		
1034	0.50	20.58	2.416	0.49	6.41	-61.1	0.37		
1039	0.68	20.55	2.414	0.46	6.45	-55.0	0.34		
1044	0.86	20.53	2.408	0.39	6.44	-47.7	0.57		
1049	1.10	20.37	2.405	0.36	6.46	-43.7	0.62		
1054	1.30	20.33	2.397	0.33	6.48	-39.8	0.73		
1057	START SAMPLE COLLECTION								
1111	END SAMPLE COLLECTION 1.2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 190

SAMPLE ID: 039

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1017	0	PUMP	ON					10/12	58
1024	0.05	22.19	1.871	1.43	6.36	-278.4	1.60		
1029	0.20	21.54	1.849	0.46	6.64	-260.4	0.68		
1034	0.35	21.12	1.841	0.28	6.79	-240.1	0.59		
1039	0.50	21.07	1.836	0.24	6.81	-237.4	0.62		
1044	0.68	21.05	1.832	0.21	6.82	-235.8	0.61		
1049	0.82	20.91	1.830	0.21	6.82	-234.7	0.52		
1054	1.00	20.77	1.827	0.19	6.83	-234.6	0.43		
1058	START SAMPLE COLLECTION								
1115	END SAMPLE COLLECTION ! LL IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070127541

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - WELL VAULT PARTIALLY FLOODED

WELL ID: MW-36-24
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SC, DB
PUMP DEPTH: 14" ft

WATER QUALITY: DTW = 3.48 GW Elevation = 8.118 ACTUAL DEPTH = 21.563

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1253	21.563	PUMP ON							0
1300	21.629	31.01	3.271	0.66	7.14	-133.0	1.21		0.11
1305	21.643	31.40	3.388	0.36	7.18	-133.8	0.51		0.31
1310	21.659	31.54	3.428	0.35	7.23	-136.6	1.39		0.48
1315	21.661	31.60	3.457	0.23	7.26	-140.2	1.21		0.71
1317	START	SAMPLE COLLECTION							
1324	END	"		"	7.21	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.86 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-41
SAMPLE ID: 017

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Good
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

41 (DTB) - 3.07 (DTW) = 37.93 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 37.93 x 0.041 (Multiplier) = 1.555 (Well Volume) gal

1.555 x 1.5 = 2.33 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 3.07 GW Elevation = 8.684

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1253	0	3.07	PUMP ON						
1300	0.11	12.24	30.54	1.646	0.94	7.32	-154.1	1.85	
1305	0.25	—	30.74	1.640	0.55	7.28	-137.4	3.31	
1310	0.40	—	30.68	1.661	0.60	7.26	-150.5	4.75	
1315	0.60	—	30.22	1.704	0.33	7.30	-144.0	4.34	
1320	0.69	—	~~WELL DRY; LET RECHARGE BEFORE SAMPLING~~						
	~~START SAMPLE COLLECTION~~								
	~~END~~	"	"	"	~~2L IPEC~~				
1335	0.90	—	29.39	1.747	0.32	7.51	-109.6	3.63	
1338	0.95	—	WELL DRY,						
1340	START SAMPLE COLLECTION								
1418	END	"		"	2L	IPEC			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-52
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/19
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Good
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

52 (DTB) - 3.48 (DTW) = 48.52 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 48.52 x 0.041 (Multiplier) = 1.99 (Well Volume) gal

1.99 x 1.5 = 2.98 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 3.18 gal

WATER QUALITY: DTW = 3.48 GW Elevation = 8.19

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1253	0	3.48	PUMP ON						
1306	0.50	11.43	29.45	2.365	0.25	7.37	-195.0	1.05	
1321	1.00	12.81	27.91	2.579	0.18	7.37	-202.8	0.44	
1327	1.50	11.97	27.40	2.446	0.14	7.36	-168.0	0.66	
1354	2.00	11.37	27.50	2.263	0.17	7.33	-176.5	1.20	
1415	2.50	11.28	27.47	2.229	0.16	7.29	-167.9	0.73	
1433	3.00	11.31	27.49	2.186	0.13	7.27	-169.0	0.98	
1434	START SAMPLE COLLECTION								
1452	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070[illegible]54

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-22
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.55 GW Elevation = 6.307 ACTUAL DEPTH = 13.326

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0949	13.326	PUMP ON							
1000	13.202	30.71	2.260	0.69	6.85	-87.8	0.89		0.21
1005	13.200	30.45	2.244	0.53	6.83	-80.9	1.16		0.30
1010	13.214	30.56	2.240	0.45	6.82	-86.7	1.24		0.45
1015	13.206	30.67	2.237	0.43	6.96	-93.4	0.13		0.63
1017	START SAMPLE COLLECTION								
1035	END	"	"		: 2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.70 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-32
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.49 GW Elevation = 6.301 ACTUAL DEPTH = 15.967

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0949	15.967	PUMP	ON						
1000	15.939	29.02	2.114	2.60	7.30	130.8	0.40		0.05
1005	15.956	29.26	2.101	1.52	7.37	151.1	0.01		0.20
1010	15.937	29.57	2.097	0.87	7.40	70.0	0.12		0.30
1015	15.969	29.73	2.096	0.61	7.41	17.7	0.00		0.40
1020	15.940	29.85	2.096	0.56	7.42	-12.0	0.71		0.56
1025	15.935	29.85	2.098	0.53	7.42	-21.7	0.46		0.72
1030	15.971	29.84	2.101	0.40	7.43	-34.7	0.08		0.83
1034	15.947	29.88	2.103	0.48	7.43	-41.8	0.15		0.95
1038	15.946	29.90	2.105	0.39	7.43	-47.6	0.46		1.08
1041	15.939	29.95	2.104	0.33	7.44	-50.1	0.01		1.21
1044	15.982	29.95	2.104	0.32	7.44	-52.3	0.01		1.32
1046	START	SAMPLE	COLLECTION						
1100	END	"	"		2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.47 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-37-40
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, DRIZZLE, 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/11
SAMPLER(S): CB, SL

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition GOOD
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

40	-	6.98	=	33.02 ft
DTB		DTW		Well Column Height

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 33.02 x 0.041 (Multiplier) = 1.35 (Well Volume) gal

1.35 x 1.5 = 2.03 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.25 gal

WATER QUALITY: DTW = 6.98 GW Elevation 7.872

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0959	0	6.93	PUMP ON						
1027	0.25	10.88	28.67	2.188	0.62	7.06	-144.3	1.82	
1037	0.50	11.10	28.54	2.185	0.45	7.12	-176.4	59.69	
1050	1.00	10.50	28.24	2.179	0.35	7.17	-169.7	154.5	
1104	1.60	9.24	27.06	2.170	1.40	7.17	-137.2	288.9	
1111	2.00	9.49	26.82	2.162	0.45	7.18	-129.8	187.0	
1114	START SAMPLE COLLECTION								
1124	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-57
SAMPLE ID: 023

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, DRIZZLE, 70's

PROJECT NO: 01.0017869.92
DATE: 8/16/14
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.83 GW Elevation 7.958 ACTUAL DEPTH = 43.732

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
0959	43.771	PUMP ON							gal 0
1007	43.492	27.95	2.128	1.41	6.94	128.3	1.17		0.05
1012	43.383	27.94	2.145	1.34	7.02	34.6	0.39		0.18
1017	43.255	27.89	2.149	1.23	7.07	16.6	0.01		0.25
1022	43.244	27.88	2.154	1.26	7.09	10.8	0.01		0.35
1027	43.251	27.86	2.152	1.28	7.12	10.9	0.01		0.48
1030	START SAMPLE COLLECTION								
1055	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.68 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-41-40
SAMPLE ID: 022

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation = ACTUAL DEPTH =

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1334	70.491	PUMP	ON						0
1345	70.319	21.08	1.903	3.94	7.55	46.2	39.66		0.14
1358	70.376	20.19	1.894	4.47	7.59	45.0	19.61		0.29
1400	70.399	20.33	1.886	4.39	7.59	44.6	13.24		0.42
1405	70.300	20.18	1.883	4.51	7.58	46.8	15.31		0.52
1407	START	SAMPLE COLLECTION							
1439	END	"	"		: 2L IPEC				
					0.25L IPEC (TOTAL METALS)				
					0.25L IPEC (DISSOLVED METALS)				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AG
flow meter	
turbidity meter	20070404293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No Bolts

NOTES AND OBSERVATIONS: Total volume purged 0.67 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-41-63
SAMPLE ID: 021

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY CLOUDY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

63 (DTB) - 24.66 (DTW) = 38.34 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.34 x 0.041 (Multiplier) = 1.57 (Well Volume) gal

1.57 x 1.5 = 2.35 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.45 gal

WATER QUALITY: DTW = 24.66 GW Elevation 29.47

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1340	0	—	PUMP ON						
1343	0.10	—	20.82	2.221	0.48	7.46	-42.5	—	
1400	0.50	—	19.41	2.151	2.29	7.30	-37.6	59.08	
1403	1.25	—	18.61	2.102	1.27	7.24	-32.8	74.15	
1405	1.50	—	18.40	2.068	1.03	7.16	-34.0	55.33	
1407	1.75	—	18.29	2.046	0.96	7.19	-33.7	33.89	
1409	2.00	—	18.21	2.036	0.90	7.18	-42.7	26.76	
1411	2.25	—	18.24	2.032	1.02	7.19	-52.8	23.45	
1413	START SAMPLE COLLECTION								
1420	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-42-49
SAMPLE ID: 027

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 34.71 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
										gal
1226	34.71	PUMP	ON					5/10	22	0
1252	34.87	28.03	1.520	3.60	7.02	53.5	3.63		24	0.01
1257	34.91	22.99	1.441	5.82	7.19	58.8	4.63			0.05
1302	34.92	22.58	1.343	6.19	7.25	65.1	10.09			0.15
1307	34.94	22.43	1.309	5.81	7.31	70.7	12.30			0.25
1312	34.95	22.36	1.287	5.71	7.39	76.2	7.72			0.35
1317	34.96	22.43	1.274	5.65	7.45	79.1	7.68			0.45
1322	34.97	22.59	1.247	5.54	7.51	80.7	7.62			0.55
1327	34.98	22.68	1.246	5.64	7.57	81.6	7.58			0.60
1329	START SAMPLE COLLECTION									
1411	END SAMPLE COLLECTION; 2L IPEC									
				0.25L	(TOTAL METALS) IPEC					
				0.25L	IPEC (DISSOLVED METALS)					
				0.25L	IPEC (TOTAL METALS) (DUPLICATE SAMPLE)					
				0.25L	IPEC (DISSOLVED METALS) (DUPLICATE SAMPLE)					
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR - BOLTS STRIPPED

NOTES AND OBSERVATIONS:

Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-42-78
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80-90's

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Fair, Bolts stripped
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

78 (DTB) - 33.34 (DTW) = 44.66 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 44.66 x 0.041 (Multiplier) = 1.831 (Well Volume) gal

1.831 x 1.5 = 2.75 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.90 gal

WATER QUALITY: DTW = 33.34 GW Elevation = 36.181

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1229	0	—	START	PUMP					
1233	0.5	—	18.12	2.357	5.54	6.48	12.3	176.7	
1235	1.0	—	17.81	2.393	4.94	6.23	14.5	209.7	
1237	1.5	—	17.49	2.407	4.60	6.12	16.6	221.7	
1239	2.0	—	17.32	2.400	4.39	6.05	17.8	214.1	
1242	2.5	—	17.15	2.390	4.11	6.03	16.6	255.7	
1243	2.75	—	17.12	2.387	4.07	6.03	13.0	273.1	
1245	START SAMPLE COLLECTION								
1250	END	"		"	2L IPEC				
	PUMP OFF				0.25L IPEC		(TOTAL METALS)		
					0.25L IPEC		(DISSOLVED METALS)		

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070493

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-28
SAMPLE ID: 020

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 15.38 GW Elevation = 32.641

Time	(DTW) or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1016	15.38	PUMP ON						5.5/22	16	0
1025	15.64	22.47	4.944	2.17	6.58	-17.8	36.87			0.07
1030	15.72	22.29	4.862	0.93	6.59	-20.9	47.11			0.12
1040	15.84	22.07	4.800	0.66	6.62	-28.8	34.83			0.23
1045	15.91	22.12	4.753	0.54	6.62	-28.5	28.34			0.31
1047	START	SAMPLE COLLECTION								
1115	END	"	"		2L IPEC					
	PUMP	OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition Fair, Missing Bolts

NOTES AND OBSERVATIONS:

Total volume purged 0.46 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-43-62
SAMPLE ID: 02

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Cloudy 70-80

PROJECT NO: 01.0017869.92
DATE: 8/4/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 16.48 GW Elevation = 31.341 ACTUAL DEPTH = 36.24

Time	DTW or GW Elevation (ACTUAL DEPTH) (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes gal
1020	36.214	PUMP ON						6/6	30	0
1025	35.473	17.91	2.724	1.27	7.10	114.0	143.9			0.08
1030	35.148	17.52	2.784	0.47	7.04	82.7	357.3			0.25
1035	35.010	17.40	2.780	0.30	7.04	73.4	341.7			0.42
1040	34.950	17.60	2.772	0.61	7.06	65.8	293.3			0.62
1045	34.911	17.67	2.764	0.48	7.07	62.7	268.5			0.80
1050	34.886	17.52	2.752	0.30	7.08	59.8	266.1			0.95
1055	34.866	17.53	2.745	0.27	7.10	60.5	201.3			1.20
1100	34.850	17.49	2.740	0.26	7.09	59.7	176.4			1.38
1105	34.850	17.43	2.741	0.24	7.10	58.0	136.2			1.60
1110	34.850	17.43	2.737	0.23	7.11	58.2	110.3			1.80
1115	34.850	17.44	2.735	0.24	7.12	58.5	111.3			1.90
1120	34.809	17.46	2.734	0.25	7.13	57.2	100.7			2.10
1122	START SAMPLE COLLECTION									
1135	END SAMPLE COLLECTION; 2L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K1594 AG
turbidity meter	20070293

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR MISSING BOLTS

NOTES AND OBSERVATIONS:

Total volume purged 2.34 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-66
SAMPLE ID: 022

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70'S

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

66 (DTB) - 53.48 (DTW) = 12.52 **Well Column Height** ft

Well Vault Condition _____
Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 12.52 x 0.163 **Multiplier** = 2.04 **Well Volume** gal

2.04 x 1.5 = 3.06 **Designed Purge Volume** gal

TOTAL VOLUME PURGED: _____ gal

WATER QUALITY: DTW = 53.48 GW Elevation = 39.54 ACTUAL DEPTH = 11.108

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0948	0	11.107	PUMP ON						10/15	38	
0955	0.05	10.624	19.42	1.255	3.08	6.93	-21.2	63.07			
1000	0.20	10.309	19.09	0.1098	5.20	6.93	-37.2	54.89			
1012	0.50	9.480	19.00	0.416	6.19	7.27	-26.6	42.58			
1022	0.75	8.963	18.96	0.378	6.48	7.35	-17.0	21.52			
1030	1.00	8.464	19.01	0.359	6.75	7.41	-14.8	17.48			
1040	1.25	8.042	19.25	0.314	6.45	7.61	-19.1	19.84			
1049	1.50	7.706	18.79	0.323	6.56	7.70	-17.6	16.67			
1058	1.75	7.443	18.65	0.356	6.38	7.71	-20.2	14.02			
1105	2.00	7.272	18.52	0.384	6.29	7.160	-19.6	10.62			
1116	2.30	7.030	19.32	0.438	6.34	7.80	-21.8	12.58			
1132	2.75	6.731	19.67	0.524	6.60	7.85	-24.8	13.56			
1141	3.00	6.576	18.88	0.573	6.78	7.81	-30.6	10.25			
1143	START SAMPLE COLLECTION										
1208	END SAMPLE COLLECTION!				2L IPEC (ROUTINE)						
					0.5L IPEC (GROSS BETA)						

PUMP OFF **Equipment Used**	**Equipment Identification #**
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS: WATER TABLE ~6' HIGHER THAN LAST MONTH (7/2011). LEVEL UNUSUAL FOR WELL. WELL NORMALLY PURGES DRY; HOWEVER THIS SAMPLING EVENT WELL RECHARGED MORE THAN USUAL AND DID NOT PURGE DRY. INFORMED D. RUSCZYK VIA PHONE.

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-44-102
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 70s

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

102	-	61.38	=	40.62
DTB		DTW		**Well Column Height**

Well Vault Condition _____
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 40.62 x 0.041 (**Multiplier**) = 1.665 (**Well Volume**) gal

1.665 x 1.5 = 2.50 (**Designed Purge Volume**) gal

TOTAL VOLUME PURGED: 2.65 gal

WATER QUALITY: DTW = 61.38 GW Elevation = 61.38

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1014	0	—	PUMP ON						
1020	0.5	—	20.81	1.321	7.24	6.92	208.1	526.0	
1026	1.0	—	19.04	1.318	6.90	6.77	218.8	440.6	
1030	1.5	—	18.72	1.333	7.10	6.94	221.1	379.3	
1033	2.0	—	19.17	1.335	7.41	7.01	230.4	417.3	
1036	2.5	—	19.06	1.335	7.58	7.04	251.3		
1038	START	SAMPLE COLLECTION							
1043	END	"		"	2L IPEC				
					0.5L IPEC	(GROSS BETA - IN HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200704293 (malfunctioning)
	switched to → 200701954

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-45-42
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's - 80's

PROJECT NO: 01.0017869.92
DATE: 8/23/11
SAMPLER(S): SC, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition FAIR - BOLTS STRIPPED
Well Diameter: 2 in

WATER COLUMN HEIGHT (ft)

42 (DTB) - 18.28 (DTW) = 23.72 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 23.72 x 0.163 (Multiplier) = 3.86 (Well Volume) gal

3.86 x 1.5 = 5.80 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 4.45 gal

WATER QUALITY: DTW = 18.28 GW Elevation = 34.916 ACTUAL DEPTH = 34.944

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1010	0	22.676	PUMP	ON					6/8	26	
1024	0.5	17.775	20.09	1.742	6.97	7.37	-65.1	8.69			
1033	1.0	14.334	20.01	1.706	0.59	7.41	-58.2	3.40			
1039	1.5	13.668	20.00	1.639	0.45	7.42	-58.2	3.51			
1044	2.0	12.510	19.90	1.513	0.33	7.41	-58.8	3.03			
1049	2.5	11.513	19.85	1.417	0.31	7.41	-59.0	4.56			
1102	3.0	8.662	19.93	1.356	2.00	7.47	-53.6	33.18			
1109	3.5	7.165	19.96	1.502	1.86	7.45	-54.1	26.31			
1115	4.0	5.589	19.94	1.580	1.56	7.44	-54.6	19.82			
1124	4.25	3.590	WELL DRY. LET RECHARGE BEFORE SAMPLING								
1305	—	6.149	START SAMPLE COLLECTION								
1358			END SAMPLE COLLECTION: 2 L IPEC (ROUTINE)								
						0.5 L IPEC (IN-HOUSE GROSS BETA)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-45-61
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/23/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition _____
Well Diameter: 1 in

WATER COLUMN HEIGHT (ft)

61 (DTB) - 19.38 (DTW) = 41.62 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 41.62 x 0.041 (Multiplier) = 1.70 (Well Volume) gal

1.70 x 1.5 = 2.56 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.71 gal

WATER QUALITY: DTW = 19.38 GW Elevation 33.837

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1013	0	—							
1024	1	—	21.03	1.334	4.65	7.00	358.4	580.8	
1030	1.5	—	20.59	1.317	4.70	7.06	439.6	1000	
1035	2.0	—	20.47	1.316	4.70	7.05	462.9	1100+	
1041	2.5	—	20.21	1.309	4.80	7.07	485.4	1100+	
1042	START SAMPLE COLLECTION								
1048	END	"		"	:2L IPEC				
	PUMP	OFF			:0.5L	IPEC (GROSS BETA IN HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	200701254

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-46
SAMPLE ID: 026

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/17/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

29.7 (DTB) - 1.02 (DTW) = 28.68 (Well Column Height) ft

Well Vault Condition FAIR - MISSING BOLTS
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 28.68 x 0.653 (Multiplier) = 18.73 (Well Volume) gal

18.73 x 1.5 = 28.09 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 28.10 gal

WATER QUALITY: DTW = 1.02 GW Elevation = 15.95 ACTUAL DEPTH = 26.741

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0928	0	26.741	PUMP ON						
0942	2.5	23.245	23.05	0.828	0.49	7.42	-41.8	2.19	
0950	5.0	22.515	21.11	0.725	0.47	7.50	-44.9	1.74	
0954	7.5	22.211	21.16	0.715	0.41	7.52	-47.5	2.48	
0959	10.0	21.928	21.19	0.718	0.24	7.54	-51.2	1.29	
1015	12.5	21.312	21.34	0.755	0.21	7.60	-58.7	2.84	
1029	15.0	21.223	21.35	0.697	0.29	7.62	-61.1	4.51	
1037	17.5	21.215	21.43	0.659	0.42	7.60	-61.4	7.11	
1046	20.0	21.192	21.46	0.751	0.69	7.58	-61.6	6.87	
1059	22.5	21.264	21.51	0.900	1.25	7.59	-59.8	10.11	
1113	25.0	21.320	21.55	0.991	1.91	7.61	-59.3	5.48	
1124	27.5	21.700	21.54	1.019	2.26	7.63	-58.9	3.79	
1130	28.0	22.407	21.52	1.025	2.36	7.63	-59.8	3.29	
1131	START SAMPLE COLLECTION								
1136	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070429 3

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-26
SAMPLE ID: 025

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.75 GW Elevation = 2.421 ACTUAL DEPTH = 12.989

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0951	12.989	PUMP	ON						
1005	13.084	23.55	2.225	1.29	6.93	95.0	2.26		0.1
1010	13.078	23.66	2.251	0.95	7.00	93.0	0.43		0.2
1015	13.068	23.79	2.257	0.84	7.05	90.9	0.20		0.3
1020	13.059	23.83	2.260	0.75	7.09	88.9	0.44		0.4
1022	START	SAMPLE COLLECTION							
1046	END	"	"	"	2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	2007 04393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** fair, no bolts

NOTES AND OBSERVATIONS: Total volume purged 0.55 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-62
SAMPLE ID: 025

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny, 70-80

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.49 GW Elevation = 2,733 ACTUAL DEPTH = 16.203

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0951	16.203	PUMP	ON						
1005	16.188	24.00	2.219	0.89	6.97	112.6	1.03		0.17
1010	16.182	23.98	2.206	0.65	7.00	92.5	1.20		0.27
1015	16.174	23.98	2.202	0.51	7.03	95.7	1.28		0.38
1020	16.158	23.84	2.203	0.54	7.06	45.2	2.07		0.50
1025	16.139	23.78	2.201	0.57	7.09	15.5	0.72		0.65
1030	16.127	23.67	2.203	0.75	7.10	0.6	1.44		0.77
1035	16.115	23.69	2.201	1.01	7.12	-8.9	1.25		0.84
1040	16.097	23.59	2.203	1.22	7.13	-20.7	1.50		1.01
1045	16.078	23.60	2.202	1.21	7.13	-22.6	1.20		1.09
1050	16.069	23.46	2.203	1.12	7.14	-26.8	1.65		1.22
1057	START	SAMPLE	COLLECTION						
1116	END	"	"		:2L IPEC				

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070393

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, No bolts

NOTES AND OBSERVATIONS: Total volume purged 1.37 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-49-65
SAMPLE ID: 025

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Partly Sunny, 70-80

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.54 GW Elevation = 2.917 ACTUAL DEPTH = 14.429

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0951	14.429	PUMP	ON						
1005	14.388	23.69	1.987	1.64	7.38	-33.7	1.78		0.05
1010	14.374	23.52	2.001	0.57	7.41	-9.7	1.21		0.13
1015	14.361	23.57	2.005	0.54	7.43	-1.9	0.19		0.22
1020	14.338	23.44	2.012	0.45	7.44	0.3	0.37		0.32
1025	14.312	23.35	2.017	0.37	7.45	1.7	0.40		0.43
1027	START	SAMPLE COLLECTION							
1055	END	"	"		: 2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	17594 AC
flow meter	
turbidity meter	20070429 3

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dry, No bolts

NOTES AND OBSERVATIONS: Total volume purged 0.58 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-50-42
SAMPLE ID: 027

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70S

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 7.89 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1111	7.89	PUMP	ON						gal 0
1119	7.88	28.65	2.625	1.44	7.97	-160.5	1.25		0.05
1124	7.87	28.78	2.890	10.80	7.94	-155.4	1.32		0.20
1129	7.84	28.82	3.088	0.69	7.91	-130.9	1.37		0.34
1134	7.84	28.77	3.082	0.66	7.91	-133.8	0.90		0.44
1139	7.85	28.73	3.085	0.68	7.92	-133.7	0.95		0.58
1143	START SAMPLE COLLECTION								
1210	END SAMPLE COLLECTION: 2L IPEC (ROUTINE)								
				0.5L IPEC (IN HOUSE GROSS BETA)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	2007012554

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No bolts

NOTES AND OBSERVATIONS: Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-50-66
SAMPLE ID: 032

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/19/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 10.87 GW Elevation = 3.744 ACTUAL DEPTH = 88.307

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1111	88.387	PUMP	ON						gal 0
1119	86.559	27.34	2.369	1.28	7.23	51.8	0.11		0.01
1124	86.215	27.39	2.373	0.70	7.22	42.2	0.09		0.14
1129	86.098	27.32	2.381	0.54	7.22	43.0	0.13		0.28
1134	86.196	27.19	2.386	0.55	7.22	43.8	0.15		0.36
1139	86.365	27.24	2.385	0.56	7.23	44.8	0.16		0.48
1143	START SAMPLE COLLECTION								
1212	END SAMPLE COLLECTION! 2L IPEC (ROUTINE)								
				0.5L IPEC (IN-HOUSE GROSS BETA)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	10
flow meter	
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No bolts

NOTES AND OBSERVATIONS: Total volume purged 0.68 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 51 - 40

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

29.7 to 44.2

SAMPLING PORT

40 7

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1055	0	PUMP	ON					6.5/8.4	24
1102	0.12	16.02	2.558	6.07	6.90	-66	0.84		
1107	0.34	15.85	2.578	6.11	6.85	29.2	0.61		
1112	0.52	15.87	2.580	5.87	6.83	44.6	0.24		
1117	0.75	15.92	2.583	5.75	6.82	54.3	0.01		
1122	0.90	15.92	2.586	5.71	6.81	60.7	0.00		
1127	1.05	15.77	2.588	5.78	6.81	63.9	0.00		
1129	START	SAMPLE	COLLECTION						
1143	END SAMPLE	COLLECTION = 2L	IPEC						
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 51 - 79

SAMPLE ID: 070

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)

63.2 to 81.2

SAMPLING PORT

79 6

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1055	0	PUMP	ON					6.5/8.4	24
1102	0.05	17.19	2.894	1.06	6.47	-71.3	2.31		
1107	0.15	16.95	2.947	1.24	5.95	-54.7	4.03		
1112	0.28	16.98	2.962	1.39	5.87	-39.8	3.46		
1117	0.40	17.01	2.978	1.38	5.89	-26.4	4.04		
1122	0.56	17.06	2.974	1.37	5.92	-15.3	4.51		
1127	0.66	16.92	2.973	1.37	5.97	-9.5	4.61		
1132	0.80	16.73	2.966	1.35	6.00	-8.2	4.49		
1135	START	SAMPLE COLLECTION							
1155	END SAMPLE COLLECTION: 2 L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	2EDT042973

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 51 - 104

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

104 4

TOTAL VOLUME PURGED: 2.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					5.6/5.6	42
0911	0.25	14.76	2.910	2.14	6.48	75.6	8.50		
0917	0.75	14.53	2.927	1.92	6.53	50.3	4.72		
0922	1.00	14.43	2.940	1.78	6.57	58.6	3.21		
0927	1.25	14.31	2.938	1.66	6.60	63.0	1.91		
0932	1.60	14.20	2.938	1.59	6.62	68.4	3.35		
0937	2.00	14.18	2.935	1.51	6.64	71.6	1.06		
0942	START SAMPLE COLLECTION								
0951	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 51 - 135

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

130.2 to 143.7

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	Pump	ON					5.6/5.6	42
0911	0.15	15.85	2.722	0.94	6.00	-81.0	0.85		
0917	0.25	15.45	2.754	0.58	5.65	-56.2	0.18		
0922	0.50	15.48	2.764	0.47	5.57	-27.8	0.12		
0927	0.75	15.24	2.776	0.41	5.56	-16.0	0.32		
0932	1.15	15.11	2.772	0.40	5.55	-8.3	0.17		
0937	1.25	15.10	2.772	0.40	5.59	-3.8	0.00		
0942	1.45	15.20	2.771	0.40	5.59	-3.16	0.00		
0944	START SAMPLE COLLECTION								
1004	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20D704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 51 - 163

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

154.7 to 166.2

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 0.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	PUMP	ON					5.6/5.6	42
0911	0.01	18.37	2.384	1.31	6.29	-192.3	6.02		
0917	0.05	17.59	2.324	0.12	6.53	-190.9	1.79		
0922	0.15	17.47	2.301	0.10	6.69	-172.0	1.10		
0927	0.20	17.47	2.297	0.10	6.73	-177.9	0.04		
0932	0.30	17.09	2.306	0.09	6.76	-177.4	0.01		
0937	0.40	17.01	2.304	0.10	6.78	-174.8	0.03		
0940	START SAMPLE COLLECTION								
1018	END SAMPLE COLLECTION: 2 LIPER								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 51 - 189

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: PARTLY SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 7/28/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

184.2 to 197.8

SAMPLING PORT

189 1

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0901	0	Pump	ON					5.6/5.6	42
0911	0.05	17.05	1.642	3.08	6.60	-95.0	6.05		
0917	0.15	16.27	1.616	1.34	6.94	-116.0	3.65		
0922	0.30	16.18	1.582	0.91	6.98	-142.0	2.48		
0927	0.42	15.95	1.578	0.75	7.00	-150.7	2.27		
0932	0.55	15.80	1.570	0.70	6.99	-180.4	2.89		
0937	0.70	15.60	1.569	0.65	7.01	-221.3	3.08		
0942	0.80	15.70	1.565	0.61	7.02	-240.0	2.36		
0947	0.90	15.71	1.566	0.58	7.04	-249.8	1.49		
0952	1.05	15.64	1.567	0.53	7.05	-256.6	2.11		
0957	1.20	15.66	1.568	0.50	7.06	-267.4	1.40		
1002	1.25	16.44	1.574	0.49	7.08	-272.9	1.27		
1007	1.35	16.50	1.575	0.48	7.10	-296.1	0.68		
1012	1.50	16.03	1.573	0.47	7.11	-271.0	1.72		
1017	1.65	16.06	1.573	0.41	7.12	-269.9	1.68		
1022	1.75	16.10	1.575	0.39	7.12	-273.9	1.53		
1023	START SAMPLE COLLECTION								
1042	END SAMPLE COLLECTION; 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-53-82
SAMPLE ID: 021

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 58.69 GW Elevation 11.24 ACTUAL DEPTH = 73.13

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
0907	23.097	PUMP	ON					5/20	38	gal 0
0917	22.871	22.74	2.307	1.28	6.71	84.5	7.04			0.01
0922	22.673	21.88	2.277	5.21	6.94	66.9	35.12			0.15
0927	22.628	20.73	2.274	6.40	6.34	58.2	32.65			0.30
0932	22.819	21.00	2.271	6.60	6.30	47.7	21.94			0.40
0937	22.609	21.44	2.283	6.58	6.42	43.8	18.06			0.50
0942	22.695	21.50	2.287	6.46	6.56	40.5	14.12			0.60
0947	22.728	21.46	2.287	6.41	6.106	36.7	11.86			0.70
0952	22.708	21.69	2.304	6.14	6.75	35.0	7.51			0.80
0957	22.775	22.77	2.316	6.12	6.89	31.9	6.93			0.85
1002	22.760	22.89	2.321	6.28	6.99	28.6	6.95			0.87
1007	22.799	23.18	2.322	6.26	7.13	26.7	5.86			0.90
1012	22.813	23.55	2.323	6.58	7.19	27.1	5.45			0.95
1017	22.857	23.64	2.325	6.52	7.23	26.1	5.62			1.00
1018	START SAMPLE COLLECTION									
1111	END SAMPLE COLLECTION: 2L IPEC									
	PUMP OFF									

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070429

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR, BOLTS MISSING/STRIP

NOTES AND OBSERVATIONS:

Total volume purged 1.15 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-53-120
SAMPLE ID: 025

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny

PROJECT NO: 01.0017869.92
DATE: 8/1/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Fair, Bolts missing/stripped
Well Diameter: 4 in

WATER COLUMN HEIGHT (ft)

120 (DTB) - 59.50 (DTW) = 60.5 (Well Column Height) ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 60.5 x 0.041 (Multiplier) = 2.481 (Well Volume) gal

2.481 x 1.5 = 3.72 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 3.90 gal

WATER QUALITY: DTW = 59.50 GW Elevation = 10.69

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0927	0	—	PUMP	OFF					
0932	0.25	—	20.25	1.722	2.13	6.97	78.9	89.62	
0937	1	—	19.26	1.758	1.24	6.94	80.6	154.3	
0940	1.50	—	19.06	1.795	0.80	6.94	82.7	280.4	
0943	2	—	19.02	1.824	0.63	6.88	83.9	275.8	
0947	2.50	—	19.00	1.842	0.54	7.03	84.5	247.9	
0951	3	—	18.83	1.857	0.48	7.01	85.6	189.1	
0955	3.50	—	18.80	1.864	0.45	7.01	86.2	196.5	
0956	3.75	—	18.77	1.866	0.43	6.96	86.6	163.3	
0957	START SAMPLE COLLECTION								
1000	END PUMP OFF	"		"	"	IPEC			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 54 - 37

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

39.0 to 42.0

SAMPLING PORT

37 6

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0850	0	PUMP	ON					6/4	20
0855	0.5	22.98	2.359	1.23	6.78	-68.9	1.15	↓	↓
0900	0.75	22.63	2.313	1.29	6.91	-45.5	1.77		
0905	1.10	22.41	2.297	1.31	6.97	-36.7	0.91		
0910	1.50	22.24	2.294	1.37	7.02	-36.6	1.10		
0915	1.80	22.15	2.294	1.29	7.06	-36.2	1.43		
0918	START	SAMPLE	COLLECTION						
0925	END	"	"	2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 5I - 5B

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

51.5 to 64.0

SAMPLING PORT

5B 5

TOTAL VOLUME PURGED: 2.39 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0850	0	Pump	ON					6/4	20
0855	0.24	23.35	1.803	0.68	6.56	-34.9	2.97		
0900	0.48	22.91	1.788	0.44	6.59	-14.2	3.86		
0905	0.74	22.63	1.786	0.35	6.64	0.8	1.49		
0910	0.93	22.40	1.797	0.32	6.68	8.4	2.19		
0915	1.17	22.28	1.808	0.31	6.72	14.1	1.93		
0920	1.41	22.19	1.838	0.32	6.75	23.9	2.16		
0925	1.70	22.09	1.854	0.29	6.81	29.8	1.78		
0930	1.94	22.01	1.860	0.28	6.84	35.0	2.32		
0935	2.24	21.99	1.872	0.29	6.87	39.1	2.63		
0937	START	SAMPLE	COLLECTION						
0947	END	"	"	:2L	IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 54 - 123

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy/Rain Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/14
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

116.0 to 126.0

SAMPLING PORT

123 4

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0830	0	PUMP	ON					6/4	20
0835	0.01	24.60	1.931	2.10	6.04	28.7	7.17		
0900	0.12	24.30	1.917	0.75	6.03	23.9	1.28		
0905	0.27	23.80	1.908	0.57	6.20	16.5	1.50		
0910	0.38	23.44	1.903	0.45	6.38	8.8	0.87		
0915	0.52	23.23	1.899	0.40	6.50	4.6	1.01		
0920	0.67	23.16	1.896	0.36	6.58	0.7	0.97		
0925	0.80	23.00	1.897	0.35	6.66	-2.5	0.66		
0930	0.91	22.92	1.897	0.36	6.71	-6.0	1.17		
0935	1.10	22.86	1.895	0.31	6.74	-8.1	0.94		
0939	START	SAMPLE	COLLECTION						
0955	END	"	"		: 2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 54 - 144

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70's

PROJECT NO: 01.0017869.92
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

135.0 to 155.5

SAMPLING PORT

144 3

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	36
1110	0.4	22.59	2.171	0.57	6.47	-95.9	1.62	↓	↓
1115	0.60	22.29	2.107	0.26	6.80	-90.2	1.55		
1120	0.80	22.07	2.085	0.20	6.85	-81.4	1.11		
1125	1.00	21.93	2.088	0.20	6.94	-78.9	1.18		
1130	1.20	21.79	2.099	0.21	6.98	-76.6	1.79		
1132	START	SAMPLE	COLLECTION						
1144	END	"	"	2L IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW 54 - 173

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70s

PROJECT NO: 01.0017869.93
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

170.5 to 182.0

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	36
1110	0.40	22.73	2.023	0.90	6.54	-35.4	1.62		
1115	0.55	22.34	2.024	0.40	6.66	-6.9	1.31		
1120	0.75	22.23	2.019	0.32	6.71	14.9	1.33		
1125	1.00	22.05	2.018	0.26	6.77	24.5	1.22		
1130	1.20	21.90	2.015	0.21	6.82	27.8	1.40		
1135	1.40	21.78	2.012	0.21	6.85	33.8	1.43		
1137	START	SAMPLE	COLLECTION						
1150	END	"	"	: 2 IPEC					
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 54 - 190

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Showers 70s

PROJECT NO: 01.0017869.92
DATE: 8/15/11
SAMPLER(S): SL

SAMPLING INTERVAL (depth in ft below top of casing)

1850 to 203.6

SAMPLING PORT

190 1

TOTAL VOLUME PURGED: 1.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1100	0	PUMP	ON					7.5/6.7	36
1110	0.40	13.26	2.125	1.12	6.14	58.8	0.56		
1115	0.55	22.90	2.150	0.58	6.25	52.3	0.28		
1120	0.75	22.71	2.158	0.47	6.48	50.7	0.65		
1125	1.00	22.53	2.161	0.42	6.59	49.6	0.99		
1130	1.20	22.36	2.163	0.40	6.67	48.9	0.27		
1135	1.40	22.23	2.166	0.37	6.73	48.4	0.35		
1140	1.60	22.14	2.166	0.35	6.78	47.7	0.24		
1145	1.80	22.04	2.168	0.35	6.81	47.0	0.65		
1147	START	SAMPLE	COLLECTION						
1200	END	"	"	:2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Good

WELL ID: MW-55-24
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/12/14
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.34 GW Elevation = 9.43 ACTUAL DEPTH = 9.511

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
11:09	7.436	PUMP	ON						
11:18	6.772	22.39	1.169	1.50	7.74	-113.2	0.92		0.1
11:24	6.648	22.41	1.157	0.58	7.83	-115.0	1.03		0.25
1129	6.648	22.42	1.157	0.39	7.91	-138.2	0.55		0.42
1134	6.648	22.23	1.155	0.28	7.96	-160.0	0.44		0.60
1139	6.648	22.29	1.157	0.24	7.98	-166.3	0.74		0.75
1144	6.648	22.26	1.161	0.23	8.00	-173.1	0.49		0.85
1149	6.648	22.25	1.163	0.22	8.02	-175.7	0.53		1.00
1151	START SAMPLE COLLECTION								
1212	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC		(TOTAL METALS)			
				0.25L IPEC		(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR: BOLTS STRIPPED

NOTES AND OBSERVATIONS: Total volume purged 1.20 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-35
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/23/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.83 GW Elevation = 8.94 ACTUAL DEPTH = 23.080

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1109	23.101	PUMP ON							
1116	22.893	22.72	1.136	0.00	7.50	-82.0	0.49		0.05
1124	22.873	22.13	1.151	0.00	7.52	-98.6	0.56		0.20
1129	22.866	21.92	1.196	-0.01	7.48	-100.3	0.62		0.36
1134	22.866	21.51	1.266	-0.01	7.41	-109.1	0.37		0.54
1139	22.831	21.56	1.305	-0.01	7.39	-97.8	0.28		0.66
1144	22.829	21.46	1.353	-0.02	7.36	-93.4	0.51		0.80
1149	22.842	21.50	1.376	-0.01	7.35	-90.6	0.47		0.88
1153	START SAMPLE COLLECTION								
1215	END SAMPLE COLLECTION			1.2L	IPEC				
				0.25L	IPEC (TOTAL METALS)				
				0.25L	IPEC (DISSOLVED METALS)				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K1759 4 AG
flow meter	
turbidity meter	20070125 4

Measured Well Depth _____ **(feet from top of casing)**

Well Vault Condition FAIR: BOLTS STRIPPED

NOTES AND OBSERVATIONS:

Total volume purged 1.10 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-55-54
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/12/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.80 GW Elevation = 9.27 ACTUAL DEPTH = 41.092

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1109	41.104	PUMP	ON						
1118	41.050	23.25	2.214	3.11	7.04	11.2	1.75		0.05
1124	41.042	23.11	2.201	2.91	7.10	-30.4	1.62		0.20
1129	41.040	22.72	2.216	2.97	7.25	-23.1	1.59		0.36
1134	41.042	22.44	2.204	2.90	7.31	-17.6	1.34		0.50
1139	41.033	22.58	2.205	2.88	7.33	-15.5	1.26		0.62
1143	START SAMPLE COLLECTION								
1209	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** FAIR: BOLTS STRIPPED

NOTES AND OBSERVATIONS: Total volume purged 0.80 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 60 - 35

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

24.9 to 39.4

SAMPLING PORT

35 7

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0909	0	PUMP	ON					5/7	18
0915	0.10	20.25	2.034	4.04	10.81	-9.7	4.63		
0920	0.25	20.15	1.775	1.66	7.10	0.6	0.50		
0925	0.45	20.26	1.675	1.30	7.35	8.9	0.49		
0930	0.50	20.50	1.633	1.23	7.45	11.6	0.60		
0935	0.60	20.69	1.611	1.24	7.51	10.7	0.50		
0940	0.75	20.78	1.601	1.38	7.56	9.3	0.77		
0945	0.85	20.69	1.586	1.43	7.60	11.1	0.80		
0950	0.95	20.72	1.568	1.45	7.62	12.1	0.77		
0955	1.00	20.76	1.542	1.58	7.65	12.9	1.54		
1000	1.10	20.85	1.508	1.91	7.68	13.2	0.84		
1005	1.25	20.76	1.494	2.02	7.68	13.7	0.61		
1010	1.25	20.99	1.456	2.04	7.69	13.6	0.61		
1015	1.40	21.17	1.427	2.13	7.71	13.3	0.61		
1020	1.45	21.21	1.414	2.24	7.72	13.4	0.57		
1021	START SAMPLE COLLECTION								
1054	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Very Poor

WELL ID: MW 60 - 53

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

45.4 to 59.4

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 3.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0909	0	Pump ON						5/7	18
0915	0.10	21.27	2.517	1.50	6.03	-132.7	2.39		
0920	0.25	20.45	2.284	0.76	6.48	-121.5	0.83		
0925	0.45	19.87	2.123	0.46	6.79	-87.6	0.84		
0930	0.50	19.73	2.071	0.40	6.88	-64.5	0.55		
0935	0.65	19.51	2.051	0.38	6.95	-35.5	1.43		
0940	0.80	19.34	2.040	0.38	7.02	-13.6	1.27		
0945	1.00	19.17	2.034	0.37	7.02	1.9	0.44		
0950	1.15	18.96	2.029	0.42	7.00	21.0	1.25		
0955	1.25	18.90	2.021	0.50	7.05	42.8	1.08		
1000	1.45	18.76	2.022	0.51	7.07	51.7	1.44		
1005	1.60	18.70	2.023	0.54	7.10	57.5	0.98		
1010	1.75	18.91	2.023	0.57	7.14	62.8	2.44		
1015	1.90	19.03	2.030	0.58	7.19	68.1	1.11		
1020	2.05	18.90	2.034	0.61	7.26	78.1	1.09		
1025	2.25	18.89	2.037	0.67	7.22	88.8	0.87		
1030	2.45	18.75	2.040	0.67	7.23	107.0	1.35		
1035	2.50	18.81	2.042	0.70	7.22	119.5	0.55		
1040	2.65	18.80	2.049	0.75	7.28	159.3	0.72		
1045	2.85	18.97	2.051	0.79	7.27	145.2	0.74		
1050	2.95	18.99	2.052	0.78	7.27	152.3	0.76		
1055	3.10	19.04	2.055	0.79	7.29	151.1	0.78		
1059	START SAMPLE COLLECTION								
1145	END SAMPLE COLLECTION: 2L IPEC-ROUTINE; 2L IPEC-DUPLICATE, 2L IPEC-SPIKE								
	PUMP OFF		2L IPEC-BLANK						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 72

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

66.4 to 78.2

SAMPLING PORT

72 4

TOTAL VOLUME PURGED: 3.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP	ON					6/5	35
1244	0.85	17.55	3.767	1.78	6.99	87.4	1.18		
1249	1.25	17.23	3.607	0.84	7.03	93.6	2.51		
1254	1.75	17.20	3.492	0.75	7.07	94.4	1.73		
1259	2.00	17.04	3.434	0.70	7.11	94.6	1.59		
1304	2.40	16.87	3.381	0.68	7.14	92.5	2.53		
1309	2.80	16.82	3.348	0.64	7.16	89.9	1.61		
1314	3.10	16.58	3.337	0.63	7.19	87.0	1.12		
1318	START SAMPLE COLLECTION								
1325	END SAMPLE COLLECTION: 2L IPEC PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-60-35

WELL ID: MW 60 - 135

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

124.9 to 141.4

SAMPLING PORT

135 3

TOTAL VOLUME PURGED: 2.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP ON						615	35
1244	0.25	18.40	2.413	0.64	6.51	-103.5	1.09		
1249	0.75	17.89	2.369	0.17	6.77	-137.1	1.14		
1254	0.95	17.87	2.402	0.16	6.83	-160.0	0.85		
1259	1.15	17.65	2.478	0.16	6.89	-174.2	0.73		
1304	1.25	17.44	2.494	0.16	6.93	-188.0	0.38		
1309	1.60	17.32	2.512	0.17	6.91	-196.0	0.19		
1314	1.85	17.04	2.527	0.23	6.94	-195.7	0.23		
1319	2.10	16.92	2.541	0.38	6.99	-205.8	0.51		
1324	2.25	17.01	2.570	0.82	6.99	-209.8	0.63		
1329	2.35	17.01	2.569	1.09	7.02	-197.0	0.29		
1334	2.45	17.06	2.579	1.11	7.03	-206.3	0.19		
1339	2.55	17.13	2.612	1.05	7.04	-201.5	0.21		
1340	START SAMPLE COLLECTION								
1351	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW60-35

WELL ID: MW 60 - 154

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

147.4 to 164.9

SAMPLING PORT

154 2

TOTAL VOLUME PURGED: 1.35 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP ON						6/5	35
1244	0.20	18.51	2.108	0.00	6.60	-45.9	7.40		
1249	0.50	18.01	2.073	-0.01	7.04	-33.8	3.12		
1254	0.75	17.99	2.076	0.00	7.10	-31.4	1.11		
1259	0.85	17.80	2.076	0.00	7.15	-36.8	1.40		
1304	1.05	17.54	2.074	0.00	7.17	-31.0	1.09		
1309	START SAMPLE COLLECTION								
1322	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Ok MW-60-35

WELL ID: MW 60 - 176

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's

PROJECT NO: 01.0017869.92
DATE: 8/10/11
SAMPLER(S): S.OB

SAMPLING INTERVAL (depth in ft below top of casing)

170.9 to 200.4

SAMPLING PORT

176

TOTAL VOLUME PURGED: 1.45 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1236	0	PUMP ON						6/5	35
1244	0.10	23.17	0.773	1.79	6.10	-31.9	1.66		
1249	0.20	22.76	0.764	0.83	5.93	-49.7	1.58		
1254	0.25	23.04	0.762	0.49	6.13	-69.9	1.11		
1259	0.40	22.71	0.771	0.38	6.40	-97.9	1.24		
1304	0.50	22.04	0.774	0.31	6.90	-132.1	1.10		
1309	0.60	21.73	0.773	0.21	7.02	-148.4	0.71		
1314	0.70	21.31	0.774	0.19	7.14	-159.9	1.22		
1319	0.80	21.04	0.772	0.25	7.15	-167.0	0.98		
1324	0.90	21.34	0.767	0.14	7.17	-175.4	0.44		
1329	1.00	21.10	0.770	0.13	7.28	-184.1	0.88		
1334	1.10	21.16	0.768	0.16	7.22	-187.7	0.50		
1339	1.20	21.31	0.767	0.16	7.22	-194.4	0.68		
1340	START SAMPLE COLLECTION								
1412	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition See MW-10-35

WELL ID: MW-62-18
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.16 GW Elevation = 0.64 ACTUAL DEPTH = 4.242

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0905	4.242	PUMP ON							
0915	4.117	23.11	4.600	7.91	7.05	155.4	3.55		0.01
0920	4.088	23.01	4.537	5.34	7.20	66.8	1.48		0.08
0925	4.052	22.93	4.440	4.61	7.31	-16.7	1.24		0.26
0930	4.012	22.92	4.407	4.28	7.34	-22.2	1.20		0.45
0935	3.992	22.81	4.377	4.05	7.35	-31.2	0.90		0.61
0940	3.977	22.64	4.400	3.64	7.35	-36.9	0.64		0.81
0945	3.961	22.54	4.470	3.19	7.34	-37.7	0.36		0.98
0950	3.951	22.55	4.530	3.00	7.34	-39.6	0.69		1.08
0955	3.941	22.62	4.587	2.75	7.34	-38.7	0.65		1.20
0957	START SAMPLE COLLECTION								
1018	END	"	"	2L	IPEC				
				0.25L	IPEC	(TOTAL METALS)			
				0.25L	IPEC	(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.35 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-62-37
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = GW Elevation =

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0905	11.72	PUMP ON							
0915	11.85	19.79	1.501	1.34	6.79	133.3	6.84		0.08
0920	11.87	19.51	1.509	0.99	6.85	127.8	5.86		0.18
0925	11.87	19.32	1.515	0.80	6.93	117.8	3.51		0.35
0930	11.87	19.17	1.519	0.70	7.01	106.1	0.64		0.53
0935	11.87	19.06	1.522	0.68	7.04	97.9	1.00		0.63
0940	11.87	18.87	1.524	0.60	7.08	83.4	0.42		0.80
0945	11.84	18.74	1.525	0.56	7.12	68.2	0.38		1.00
0950	11.84	18.76	1.525	0.55	7.15	56.7	0.25		1.18
0955	11.83	18.79	1.526	0.52	7.16	50.5	1.00		1.28
1000	11.82	18.81	1.527	0.49	7.19	37.0	0.38		1.45
1004	11.81	18.78	1.527	0.49	7.21	24.8	0.55		1.57
1008	11.80	18.79	1.527	0.49	7.21	20.4	0.56		1.70
1011	11.80	18.78	1.527	0.49	7.22	14.8	0.35		1.80
1013	START	SAMPLE COLLECTION							
1035	END	"	"	2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 62 - 53

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/3/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

49.6 to 54.1

SAMPLING PORT

53 6

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	25
1120	0.10	20.81	1.407	0.93	6.97	-20.2	1.37		
1125	0.28	21.04	1.404	0.65	7.02	-48.9	0.45		
1130	0.40	21.46	1.405	0.62	7.08	-64.8	0.21		
1135	0.48	21.78	1.404	0.60	7.14	-79.5	0.16		
1140	0.55	22.11	1.404	0.60	7.20	-89.5	0.24		
1145	0.65	21.19	1.408	0.59	7.22	-94.9	0.22		
1150	0.70	22.40	1.406	0.58	7.26	-101.5	0.29		
1155	0.75	22.53	1.409	0.59	7.29	-103.4	0.27		
1196	START SAMPLE COLLECTION								
1244	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 71

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70s

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

61.1 to 80.6

SAMPLING PORT

71 5

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	25
1120	0.10	20.94	1.404	0.24	7.22	-174.2	0.81		
1125	0.30	20.44	1.405	0.20	7.24	-160.2	0.95		
1130	0.50	20.06	1.403	0.15	7.28	-154.5	0.63		
1135	0.70	19.69	1.402	0.16	7.30	-156.0	0.91		
1140	0.90	19.52	1.401	0.15	7.31	-157.0	0.85		
1142	START SAMPLE COLLECTION								
1158	END SAMPLE COLLECTION:			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD

WELL ID: MW 62 - 92

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL/CB

SAMPLING INTERVAL (depth in ft below top of casing)

88.6 to 99.1

SAMPLING PORT

92 4

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1115	0	PUMP ON						5/6	25
1120	0.10	21.70	1.404	2.51	7.07	-67.7	0.72		
1125	0.25	21.13	1.403	1.19	7.23	-59.2	0.42		
1130	0.45	20.66	1.403	0.80	7.29	-59.0	0.85		
1135	0.65	20.34	1.401	0.65	7.30	-56.0	1.29		
1140	0.85	20.09	1.401	0.57	7.31	-54.4	1.50		
1146	1.05	19.94	1.398	0.50	7.30	-54.8	1.58		
1150	1.15	19.81	1.400	0.46	7.31	-58.9	1.96		
1153	START SAMPLE COLLECTION								
1210	END SAMPLE COLLECTION			~2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 138

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70'S

PROJECT NO: 01.0017869.92
DATE: 8/3/14
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

126.1 to 143.6

SAMPLING PORT

138 3

TOTAL VOLUME PURGED: 1.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0900	0	PUMP	ON					6/4	30
0910	0.10	22.42	1.467	0.20	6.64	-193.7	0.00		
0915	0.25	21.90	1.480	0.09	6.78	-185.9	0.00		
0920	0.42	21.45	1.482	0.10	6.87	-162.7	0.00		
0925	0.600	21.07	1.481	0.11	6.93	-146.9	0.00		
0930	0.75	20.88	1.481	0.09	6.97	-131.0	0.00		
0935	0.90	20.64	1.479	0.07	7.00	-122.8	0.00		
0940	1.05	20.42	1.480	0.08	7.03	-117.1	0.00		
0945	1.25	20.21	1.479	0.07	7.04	-118.1	0.00		
0946	START SAMPLE COLLECTION								
1008	END SAMPLE COLLECTION: 2 L IPEC								
			0.25 L IPEC (TOTAL METALS)						
			0.25 L IPEC (DISSOLVED METALS)						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070154

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 62 - 182

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/3/11
SAMPLER(S): SL, CB

SAMPLING INTERVAL (depth in ft below top of casing)

177.6 to 198.7

SAMPLING PORT

182 1

TOTAL VOLUME PURGED: 1.05 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0900	0	PUMP ON						6/4	30
0910	0.01	23.66	1.409	1.66	6.56	-59.2	0.01		
0915	0.10	23.25	1.383	0.28	6.90	-86.9	1.37		
0920	0.28	22.78	1.371	0.17	7.14	-51.2	0.00		
0925	0.40	22.39	1.356	0.14	7.12	-24.7	0.00		
0930	0.50	22.20	1.350	0.10	7.15	-18.2	0.00		
0935	0.65	21.81	1.346	0.12	7.31	-13.5	0.00		
0940	0.80	21.57	1.344	0.10	7.30	-11.4	0.00		
0945	0.85	21.36	1.344	0.10	7.27	-9.5	0.00		
0948	START SAMPLE COLLECTION								
1020	END SAMPLE COLLECTION: 2L IPEC								
				0.25 L IPEC (TOTAL METALS)					
				0.25 L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-6318
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80-90

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.80 GW Elevation = 0.259 ACTUAL DEPTH = 4.369

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
0912	4.369	PUMP	ON						0
0920	4.259	20.76	2.611	0.27	6.80	-111.4	3.77		0.15
0925	4.267	20.71	2.589	0.23	6.86	-144.3	0.11		0.22
0930	4.294	20.72	2.433	0.18	6.95	-149.5	0.58		0.34
0935	4.323	20.55	2.401	0.20	7.00	-148.1	0.00		0.49
0937	START	SAMPLE COLLECTION							
1002	END	"	"	2L	IPEC				
~~FIELD~~				0.25L	IPEC	(TOTAL METALS)			
				0.25L	IPEC	(DISSOLVED METALS)			
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.64 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-63-34
SAMPLE ID: 019

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80-90

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 12.83 GW Elevation = 0.229 ACTUAL DEPTH = 11.896

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0912	11.896	PUMP	ON						0
0920	11.832	19.79	1.364	1.25	6.74	-21.8	4.60		0.13
0925	11.843	19.61	1.358	0.92	6.83	-80.8	1.00		0.20
0930	11.861	19.50	1.352	0.80	6.92	-104.4	0.00		0.32
0935	11.886	19.25	1.348	0.69	6.99	-107.7	0.08		0.46
0940	11.915	19.18	1.348	0.61	7.02	-114.4	0.00		0.61
0942	START	SAMPLE	COLLECTION						
1014	END	"	"	2L IPEC					
				0.25L IPEC	(TOTAL METALS)				
				0.25L IPEC	(DISSOLVED METALS)				
				0.25L IPEC	(TOTAL METALS DUPLICATE)				
				0.25L IPEC	(DISSOLVED METALS DUPLICATE)				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	20704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.76 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 63 - 50

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90s

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

41.5 to 58.0

SAMPLING PORT

50 7

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					7/7.4	20
1055	0.10	20.46	1.098	0.67	6.95	-72.0	0.00		
1100	0.30	19.97	1.098	0.23	7.45	-51.8	0.00		
1105	0.50	19.72	1.101	0.24	7.50	-47.0	0.00		
1110	0.75	19.47	1.103	0.25	7.05	-40.9	0.00		
1115	0.90	19.32	1.105	0.27	7.17	-40.9	0.00		
1120	1.10	19.07	1.108	0.25	7.09	-40.3	0.00		
1122	START	SAMPLE	COLLECTION						
1138	END	SAMPLE	COLLECTION: 2 L IPEC						
				0.25 L IPEC (TOTAL METALS)					
				0.25 L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	2907 01254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 93

SAMPLE ID: 020

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

81.5 to 100.5

SAMPLING PORT

93 5

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					7/7.4	20
1055	0.01	21.72	1.150	0.74	7.33	-79.1	3.10		
1100	0.10	21.10	1.157	0.11	7.51	-69.2	1.02		
1105	0.28	20.96	1.159	0.09	7.56	-47.0	0.11		
1110	0.40	20.56	1.158	0.09	7.59	-38.2	0.02		
1115	0.52	20.40	1.155	0.14	7.60	-34.6	0.00		
1120	0.65	20.23	1.155	0.13	7.62	-30.3	0.00		
1125	0.75	20.01	1.152	0.12	7.63	-29.7	0.00		
1126	START SAMPLE COLLECTION								
1150	END SAMPLE COLLECTION			1 2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 112

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's-90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

106.5 to 112.0

SAMPLING PORT

112 4

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1050	0	PUMP	ON					7/7.4	20
1055	0.01	22.41	1.267	0.11	7.24	-378.8	0.77		
1100	0.10	21.81	1.237	0.03	7.39	-357.0	0.00		
1105	0.22	21.46	1.215	0.04	7.39	-310.0	0.27		
1110	0.32	21.19	1.267	0.02	7.38	-284.5	0.08		
1115	0.48	20.95	1.301	0.03	7.35	-271.0	0.28		
1120	0.60	20.78	1.307	0.04	7.37	-264.8	0.59		
1125	0.75	20.63	1.306	0.03	7.40	-256.7	0.00		
1130	0.82	20.60	1.303	0.02	7.44	-252.8	0.64		
1135	0.95	20.55	1.302	0.03	7.50	-249.8	0.35		
1136	START SAMPLE COLLECTION								
1201	END SAMPLE COLLECTION:			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 121

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s-90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

118 to 127.5

SAMPLING PORT

121 3

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	Pump	ON					8/8.2	35
0914	0.10	21.38	1.571	0.69	7.17	-112.9	0.01		
0919	0.30	20.68	1.537	0.40	7.18	-93.6	0.00		
0924	0.50	20.21	1.535	0.29	7.20	-86.3	0.00		
0929	0.75	19.70	1.550	0.25	7.31	-78.0	0.00		
0934	0.90	19.38	1.558	0.21	7.14	-70.0	0.00		
0939	1.10	19.20	1.556	0.22	7.17	-63.8	0.00		
0944	1.30	19.15	1.555	0.21	7.15	-60.9	0.00		
0946	START SAMPLE COLLECTION								
1003	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Good

WELL ID: MW 63 - 163

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

150.5 to 165

SAMPLING PORT

163 2

TOTAL VOLUME PURGED: 1.20 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP	ON					8/8.2	35
0914	0.08	21.29	1.067	1.21	7.17	-93.9	21.34		
0919	0.20	20.51	1.035	0.35	7.39	-99.6	2.02		
0924	0.40	20.01	1.021	0.22	7.37	-92.0	1.90		
0929	0.60	19.51	1.017	0.19	7.37	-84.6	2.37		
0934	0.75	19.15	1.018	0.30	7.39	-77.5	1.62		
0939	0.88	18.96	1.019	0.27	7.40	-70.4	1.62		
0944	1.05	18.90	1.019	0.28	7.41	-71.6	1.62		
0947	START SAMPLE COLLECTION								
1006	END SAMPLE COLLECTION: 2L IPEC								
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	200701254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW 63 - 174

SAMPLE ID: 019

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/2/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

168.0 to 191.1

SAMPLING PORT

174 1

TOTAL VOLUME PURGED: 1.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0910	0	PUMP	ON					8/8.2	35
0914	0.08	21.71	1.035	0.06	7.20	-367.6	0.19		
0919	0.20	21.04	1.005	0.06	7.14	-370.5	0.35		
0924	0.38	20.56	0.985	0.05	7.17	-305.9	0.01		
0929	0.56	20.13	0.979	0.05	7.12	-279.5	0.26		
0934	0.75	19.67	0.981	0.06	7.11	-276.0	0.08		
0939	0.90	19.45	0.986	0.05	7.14	-265.2	0.45		
0944	1.05	19.45	0.985	0.05	7.11	-259.0	0.61		
0949	1.30	19.17	0.986	0.03	7.09	-249.8	0.00		
0954	1.48	19.10	0.988	0.03	7.12	-248.3	0.00		
0959	1.65	18.79	0.988	0.04	7.15	-248.0	0.00		
0959	START SAMPLE COLLECTION								
1018	END SAMPLE COLLECTION:			2L IPEC					
				0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD

WELL ID: MW-66-21
SAMPLE ID: 018

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.09 GW Elevation = 7.317 ACTUAL DEPTH = 9.446

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0935	9.446	PUMP ON							
0950	9.273	22.34	4.910	0.52	6.49	-240.1	18.95		0.07
0955	9.182	22.46	4.910	0.43	6.64	-241.4	11.11		0.18
1000	9.152	22.65	4.901	0.36	6.62	-202.7	9.85		0.26
1005	9.126	22.80	4.893	0.35	6.61	-211.8	12.34		0.33
1010	9.085	22.91	4.901	0.30	6.61	-227.0	10.83		0.41
1015	9.053	23.09	4.888	0.27	6.63	-220.0	9.39		0.49
1020	9.021	23.41	4.877	0.29	6.61	-218.0	9.51		0.57
1022	START	SAMPLE	COLLECTION						
1055	END	"	"	2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.72 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-66-36
SAMPLE ID: 017

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 11.04 GW Elevation = 2.334 ACTUAL DEPTH = 13.396

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0935	13.396	PUMP	ON						
0950	13.156	21.96	2.516	2.43	7.19	-77.3	2.19		0.03
0955	13.140	21.72	2.623	1.31	7.34	-78.9	1.12		0.11
1000	13.099	21.86	2.640	0.84	7.39	-82.6	1.15		0.20
1005	13.057	21.86	2.659	0.68	7.44	-89.7	0.83		0.28
1010	13.059	21.76	2.682	0.67	7.47	-95.3	0.72		0.37
1015	13.011	21.92	2.683	0.51	7.48	-94.9	1.04		0.42
1017	START	SAMPLE	COLLECTION						
1049	END	"	"	: 2L	IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070 1954

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.57 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 67 - 39

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/14
SAMPLER(S): CB/SL

SAMPLING INTERVAL (depth in ft below top of casing)

28.8 to 54.3

SAMPLING PORT

39 7

TOTAL VOLUME PURGED: 1.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP ON						8/8	20
1144	0.28	22.05	2.350	0.64	7.24	-80.3	1.50		
1149	0.50	21.22	2.292	0.54	7.36	-104.5	1.26		
1154	0.68	21.26	2.269	0.51	7.42	-113.9	1.04		
1159	0.85	21.15	2.249	0.51	7.47	-128.3	0.97		
1204	1.15	20.91	2.230	0.50	7.52	-134.2	0.85		
1209	1.40	21.18	2.218	0.47	7.54	-138.5	1.02		
1213	START SAMPLE COLLECTION								
1226	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR MISSING MANIFOLD

WELL ID: MW 67 - 105

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80s - 90s

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

90.3 to 110.8

SAMPLING PORT

105 6

TOTAL VOLUME PURGED: 1.50 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP ON						8/8	20
1144	0.10	23.37	1.610	0.18	6.83	-187.6	2.58		
1149	0.25	22.41	1.589	0.16	6.94	-210.7	2.18		
1154	0.35	22.43	1.588	0.22	6.96	-218.9	1.98		
1159	0.50	22.19	1.594	0.80	6.98	-229.5	6.09		
1204	0.65	22.12	1.609	0.62	7.02	-234.7	2.16		
1209	0.75	22.34	1.603	0.33	7.01	-224.9	1.75		
1214	0.85	22.47	1.606	0.22	7.01	-240.9	1.71		
1219	1.05	22.32	1.609	0.14	7.03	-246.5	1.84		
1224	1.20	22.37	1.608	0.12	7.03	-248.0	1.51		
1229	1.35	22.66	1.618	0.12	7.04	-250.7	1.65		
1230	START SAMPLE COLLECTION								
1248	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 173

SAMPLE ID: 018

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: sunny, 80s-90s

PROJECT NO: 01.0017869.92
DATE: 8/8/14
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

164.8 to 188.3

SAMPLING PORT

173 5

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1134	0	PUMP	ON					8/8	20
1144	0.01	22.63	1.104	0.76	6.57	-78.7	3.23		
1149	0.10	22.31	1.103	0.19	6.72	-109.8	3.91		
1154	0.20	22.46	1.170	0.13	6.78	-148.7	4.35		
1159	0.30	22.25	1.229	0.16	6.84	-187.0	3.62		
1204	0.40	22.17	1.247	0.18	6.88	-209.7	5.88		
1209	0.50	22.04	1.244	0.14	6.89	-238.7	3.25		
1214	0.60	22.02	1.240	0.10	6.88	-246.5	2.68		
1219	0.70	22.01	1.231	0.09	6.90	-248.9	3.15		
1224	0.80	21.91	1.223	0.09	6.93	-248.4	2.77		
1226	START	SAMPLE	COLLECTION						
1253	END SAMPLE COLLECTION - 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 219

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/18/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

209 to 229.8

SAMPLING PORT

219 4

TOTAL VOLUME PURGED: 2.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	PUMP	ON					6/6	50
0945	0.25	20.28	1.234	2.77	6.55	-25.5	1.16		
0950	0.50	19.83	1.227	1.07	6.64	-19.9	0.58		
0955	0.75	19.86	1.216	0.70	6.73	-8.5	1.45		
1000	1.00	20.57	1.216	0.56	6.82	-13.0	1.13		
1005	1.25	19.62	1.223	0.51	6.88	-15.2	1.18		
1010	1.50	19.14	1.217	0.48	6.88	-14.4	1.12		
1015	1.75	19.20	1.210	0.39	6.88	-17.6	1.00		
1020	2.00	19.30	1.214	0.36	6.92	-23.4	0.97		
1022	START	SAMPLE	COLLECTION						
1033	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - MISSING MANIFOLD

WELL ID: MW 67 - 276

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90's

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

250.8 to 281.3

SAMPLING PORT

276 3

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	PUMP	ON				3.20	10/6	50
0946	0.1	20.96	1.019	1.70	6.85	-68.2	68.2		
0950	0.35	20.43	0.991	0.80	6.12	-67.2	1.78		
0955	0.55	20.37	0.985	0.54	5.95	-22.2	1.42		
1000	0.75	21.02	0.982	0.45	5.98	-6.0	1.64		
1005	0.85	20.40	0.983	0.43	6.09	-1.2	0.96		
1010	1.05	19.70	0.976	0.33	6.08	9.9	1.25		
1015	1.25	19.56	0.973	0.30	5.99	10.9	1.00		
1020	1.55	19.76	0.967	0.28	6.10	8.9	1.56		
1025	1.75	19.53	0.967	0.26	6.20	7.7	1.51		
1030	1.85	19.50	0.966	0.26	6.25	9.5	1.48		
1032	START	SAMPLE	COLLECTION						
1045	END	SAMPLE	COLLECTION: 2L IPEC						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
turbidity meter	10704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR - MISSING MANIFOLD

WELL ID: MW 67 - 323

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80's - 90s

PROJECT NO: 01.0017869.92
DATE: 8/5/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

317.8 to 328.3

SAMPLING PORT

323 2

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	PUMP ON						6/6	50
0945	0.01	21.81	0.894	1.23	6.26	-141.2	2.96		
0950	0.15	21.07	0.850	0.10	6.35	-145.0	7.97		
0955	0.25	21.25	0.826	0.09	6.51	-158.4	2.84		
1000	0.45	21.97	0.828	0.06	6.59	-223.7	2.31		
1005	0.50	21.91	0.838	0.29	6.62	-243.6	1.93		
1010	0.75	20.62	0.844	0.11	6.61	-268.9	2.64		
1015	0.86	20.43	0.851	0.07	6.62	-279.4	0.70		
1020	1.00	20.63	0.852	0.08	6.65	-296.9	0.89		
1025	1.15	20.57	0.853	0.10	6.66	-304.4	0.63		
1030	1.25	20.42	0.853	0.12	6.69	-304.0	0.79		
1035	1.38	20.85	0.854	0.14	6.53	-303.6	0.81		
1037	START SAMPLE COLLECTION								
1053	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW 67 - 340

SAMPLE ID: 017

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 80-90's

PROJECT NO: 01.0017869.92
DATE: 8/8/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

335.3 to 347.9

SAMPLING PORT

340

TOTAL VOLUME PURGED: 1.75 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
0940	0	Pump	ON					6/6	50
0945	0.05	21.27	0.793	1.37	6.82	-103.2	1.32		
0950	0.25	20.48	0.773	0.13	7.12	-122.2	1.21		
0955	0.38	20.52	0.776	0.17	7.41	-145.8	0.51		
1000	0.50	21.05	0.761	0.33	7.45	-162.7	1.59		
1005	0.75	21.11	0.763	0.28	7.45	-179.8	0.41		
1010	1.00	19.82	0.759	0.13	7.47	-185.4	0.35		
1015	1.25	19.66	0.761	0.09	7.48	-184.9	0.06		
1020	1.38	19.92	0.762	0.07	7.47	-186.2	0.20		
1025	1.50	19.80	0.764	0.05	7.47	-190.9	0.13		
1027	START SAMPLE COLLECTION								
1043	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	04K17594 AG
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR: MISSING MANIFOLD

WELL ID: MW-101
SAMPLE ID: N/A
METALS SAMPLE ONLY

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 80's

PROJECT NO: 01.0017869.92
DATE: 8/18/14
SAMPLER(S): SL, CB
PUMP DEPTH: ~9 ft

WATER QUALITY: DTW = 6.50 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
									gal
1423	6.50	PUMP ON							
1430	6.61	22.66	1.858	1.08	7.22	-27.4	16.69		0.30
1435	6.62	22.47	1.874	0.73	7.21	-41.9	3.78		0.60
1438	6.62	22.35	1.879	0.63	7.21	-44.5	1.36		0.85
1441	6.62	22.39	1.884	0.57	7.21	-46.1	1.42		1.10
1442	START	SAMPLE COLLECTION							1.60
1445	END	"	"		0.25 L IPEC	(TOTAL METALS)			
					0.25 L IPEC	(DISSOLVED METALS)			
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	200704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No bolts

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-108
SAMPLE ID: N/A
METALS SAMPLE ONLY

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80s

PROJECT NO: 01.0017869.92
DATE: 8/18/11
SAMPLER(S): SL, CB
PUMP DEPTH: 8 ft

WATER QUALITY: DTW = 4.16 GW Elevation = 10.070 ACTUAL DEPTH = 7.149

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0955	7.149	PUMP ON							
1005	7.048	23.08	0.284	0.86	6.75	140.6	4.85		0.31
1010	7.063	22.61	0.292	0.68	6.76	109.0	5.40		0.57
1015	7.042	22.46	0.310	0.60	6.78	75.0	7.14		0.72
1020	7.035	22.35	0.350	0.53	6.79	24.2	7.48		0.90
1025	7.055	22.26	0.435	0.49	6.85	-10.9	15.00		1.16
1030	7.074	22.29	0.575	0.45	6.83	-37.7	20.53		1.32
1035	7.082	22.43	0.680	0.47	6.86	-62.3	19.64		1.49
1040	7.070	22.49	0.747	0.47	6.89	-75.4	17.21		1.67
1045	7.089	22.54	0.780	0.44	6.93	-81.9	11.94		1.80
1050	7.080	22.68	0.801	0.43	6.98	-85.9	9.11		1.93
1055	7.063	22.76	0.822	0.37	7.03	-88.0	7.80		2.10
1058	7.074	22.80	0.829	0.36	7.04	-87.9	6.44		2.20
1102	7.075	22.81	0.838	0.34	7.06	-90.8	4.80		2.36
1103	START SAMPLE COLLECTION								
1104	END	"	"	: 0.25 L IDEX (TOTAL METALS)					
				0.25 L IDEX (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	6
flow meter	
turbidity meter	200701254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** No leaks, evidence of surface water infiltration.

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

Performed field blank MW-108-FB-2 prior to sampling this well.

WELL ID: MW-111
SAMPLE ID: N/A (METALS ONLY)
MW-111-FB-1 (FIELD BLANK-1) COLLECTED AT 1030
0.25L IPEC (DISSOLVED METALS)
0.25L IPEC (TOTAL METALS)

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Sunny 70-80

PROJECT NO: 01.0017869.92
DATE: 8/12/11
SAMPLER(S): SL, CB
PUMP DEPTH: 16.5 ft

WATER QUALITY: DTW = 7.18 GW Elevation = 11.2 ACTUAL DEPTH = 8.002

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1027	7.18	PUMP ON							
1035	7.36	20.78	0.539	1.53	6.73	10.2	2.52		0.04
1040	7.43	20.94	0.525	0.73	6.81	14.6	1.85		0.19
1045	7.47	21.05	0.505	0.74	6.85	15.5	3.94		0.28
1050	7.51	21.03	0.509	0.81	6.85	19.8	3.61		0.38
1055	7.55	21.06	0.505	0.67	6.82	24.4	2.34		0.48
1057	START SAMPLE COLLECTION								
1104	END	"	"	0.25L IPEC (TOTAL METALS)					
				0.25L IPEC (DISSOLVED METALS)					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
flow meter	
turbidity meter	20701254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Dead bolts stripped

NOTES AND OBSERVATIONS: Total volume purged _____ gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

NOTE: A little evidence (smell) of electrolytic oil in purge water.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: U34D
SAMPLE ID: 030

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Drizzle 80-90's

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SL, QB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

27.25 (DTB) - 9.86 (DTW) = 17.39 **Well Column Height** ft

Well Vault Condition Fair, bolts stripped
Well Diameter: 4 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 17.39 x 0.653 (**Multiplier**) = 11.356 (**Well Volume**) gal

11.356 x 1.5 = 17.03 (**Designed Purge Volume**) gal

TOTAL VOLUME PURGED: 8.16 gal

WATER QUALITY: DTW = 9.86 GW Elevation = 4.659 ACTUAL DEPTH = 51.407

Time	Volume Purged (gal)	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
0855	0	51.407	PUMP	ON					
0859	1	50.270	30.45	1.264	0.36	8.24	-63.0	4.43	
0906	2	48.540	30.93	1.259	0.36	8.30	-59.7	1.04	
0911	3	47.440	31.06	1.253	0.54	8.09	-14.0	3.67	
0918	4	45.205	31.14	1.251	0.79	8.00	-11.2	1.95	
0923	5	43.853	31.16	1.251	0.94	8.07	-10.3	2.22	
0931	6	41.233	31.18	1.251	1.18	8.08	-4.8	1.25	
0941	7	38.558	31.06	1.252	1.31	8.14	-2.8	1.29	
0950	8	35.312	30.86	1.253	1.05	8.12	-3.5	1.15	
1000	8.5	34.017	30.85	1.254	1.34	8.09	-2.9		
1001			PUMP OFF, WELL DRY; LET RECHARGE						
1057			START	SAMPLE COLLECTION					
1105			END	"	"	"	IPEC		
			PUMP OFF						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	20070254

NOTES AND OBSERVATIONS:
Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-45
SAMPLE ID: 005

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy / Drizzle 80-90's

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 9.10 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
0853	9.10	PUMP	ON						0
0859	9.10	31.19	1.207	1.10	6.88	-141.6	2.36		0.01
0904	9.08	32.98	1.193	0.48	7.11	-125.1	1.96		0.25
0909	9.00	33.30	1.192	0.33	7.16	-138.8	1.96		0.34
0914	9.05	33.50	1.190	0.25	7.21	-137.7	2.05		0.48
0919	9.04	33.63	1.190	0.20	7.24	-154.9	1.93		0.60
0924	9.00	33.68	1.188	0.16	7.26	-174.8	2.10		0.75
0929	9.07	34.36	1.188	0.19	7.29	-197.5	2.00		0.90
0934	9.03	34.81	1.185	0.22	7.31	-204.9	1.73		1.10
0939	8.97	34.87	1.184	0.17	7.31	-210.8	1.71		1.25
0944	9.00	35.09	1.181	0.18	7.32	-215.9	1.57		1.40
0949	9.03	35.53	1.178	0.16	7.33	-220.6	1.79		1.58
0950	START	SAMPLE	COLLECTION						
1006	END SAMPLE	COLLECTION:	2L	IPEC					
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	2007 01254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Fair, Bolts Stripped

NOTES AND OBSERVATIONS: Total volume purged 1.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: U3-T1
SAMPLE ID: 033

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 70's

PROJECT NO: 01.0017869.92
DATE: 8/22/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.58 GW Elevation = 4.938 ACTUAL DEPTH = 3.465

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1349	3.468	PUMP ON							gal 0
1354	3.475	26.33	1.190	4.01	7.60	46.7	1.18		0.01
1359	3.491	26.29	1.200	1.64	7.66	-24.5	0.72		0.10
1404	3.466	26.26	1.207	1.50	7.71	-38.9	0.47		0.28
1409	3.462	26.26	1.209	1.35	7.74	-46.0	0.71		0.40
1414	3.460	26.22	1.210	1.31	7.76	-50.7	0.79		0.50
1419	3.464	26.22	1.210	1.26	7.78	-53.8	0.84		0.68
1421	START SAMPLE COLLECTION								
1440	END SAMPLE COLLECTION 12 IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	20070125H

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.82 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-T2
SAMPLE ID: 039

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Cloudy/drizzle 80-90's

PROJECT NO: 01.0017869.92
DATE: 7/29/11
SAMPLER(S): SL, CB
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.55 GW Elevation = 4.962 ACTUAL DEPTH = 3.1654

Time	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes (gal)
1124	3.204	PUMP ON							0
1130	3.165	30.32	1.165	2.31	7.35	-97.0	2.91		0.01
1135	3.166	30.09	1.140	0.83	7.30	-111.2	1.86		0.20
1140	3.165	30.17	1.134	0.46	7.33	-122.7	1.20		0.40
1145	3.177	30.88	1.123	0.29	7.29	-135.8	1.37		0.58
1150	3.170	30.59	1.128	0.29	7.29	-171.7	0.89		0.78
1155	3.176	30.76	1.122	0.19	7.44	-163.6	0.85		0.90
1200	3.179	31.74	1.121	0.15	7.69	-166.2	0.36		1.04
1205	3.179	32.07	1.120	0.14	7.36	-179.4	0.41		1.18
1210	3.181	32.17	1.126	0.15	7.43	-177.3	0.31		1.35
1215	3.175	32.15	1.123	0.11	7.41	-179.8	0.46		1.50
1216	START	SAMPLE COLLECTION							
1232	END	"	"	"	# IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 1.65 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

APPENDIX D: Q4-2011 SAMPLING DATA SHEETS

WELL ID: LAF-002
SAMPLE ID: 016

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's

PROJECT NO: 01.0017869.92
DATE: 12/13/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 73.2 GW Elevation

Time	DTW or GW Elevation (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	~~Flow Rate (gal/hr)~~ DELTA/YOUR/PROBE gal	Notes
0915	73.2	PUMP ON						5/4/42	0
0923	73.44	8.24	2.836	4.86	6.49	-20.3	0.76		0.25
0928	73.52	8.70	2.808	3.11	6.46	-11.0	0.04		0.15
0933	73.70	9.08	2.795	1.95	6.48	-6.1	0.96		0.35
0938	73.79	8.77	2.794	1.25	6.50	-3.0	0.23		0.56
0943	73.80	8.72	2.772	1.03	6.50	-1.6	0.57		0.66
0948	73.83	7.25	2.801	1.01	6.51	6.0	0.83		0.74
0953	73.85	6.04	2.755	0.96	6.50	10.1	0.44		0.80
0954	START SAMPLE COLLECTION								
~~0955~~ 56	END SAMPLE COLLECTION: 2L IPEC								
1031	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
flow meter	
turbidity meter	200701254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 0.95 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of ~~casing~~. STICK UP CASING

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: I-2
SAMPLE ID: 004

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 30's-40's

PROJECT NO: 01.0017869.92
DATE: 12/08/11
SAMPLER(S): CB, SL

WATER COLUMN HEIGHT (ft)

40.13 (DTB) - 29.42 (DTW) = 10.71 (Water Column Height) ft

Well Diameter: 2 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 10.71 x 0.163 (Multiplier) = 1.75 (Well Volume) gal

1.75 x 1.5 = 2.61 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 2.80 gal

WATER QUALITY: DTW = 29.42 Transducer Actual Depth

Time	Volume Purged (gal)	DTW or Actual Depth	Temp (°C)	Specific Conductivity (S/cm)	Dissolved Oxygen (g/l)	pH (SU)	ORP	Turbidity (NTU)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)	Notes
1358	0	43.51 29.75	PUMP ON								
1402	0.5	30.06	16.85	0.758	6.74	7.17	69.0	921.1			
1404	1.0	31.83	17.39	0.748	6.79	7.11	30.0	503.8			
1407	1.5	32.34	17.66	0.747	6.79	7.08	9.8	360.8			
1409	2.0	32.98	17.76	0.763	6.72	7.07	6.5	452.8			
1411	2.5	33.51	17.59	0.788	6.59	7.06	-0.3	573.1			
1412	2.6	34.03	17.58	0.795	6.57	7.07	-4.0	—			
1412	START SAMPLE COLLECTION										
1415	END SAMPLE COLLECTION; 2L IPEC										
	PUMP OFF										

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 30 - 69

SAMPLE ID: 042

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40s-50s

PROJECT NO: 01.0017869.92
DATE: 11/30/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

67.3 to 71.3

SAMPLING PORT

69

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1016	0	PUMP ON						6/12	40
1022	0.05	22.90	1.102	8.36	7.82	-97.4	NA		
1027	0.15	23.43	1.132	8.62	8.01	17.6	—		
1032	0.30	23.50	1.130	8.83	8.05	49.8	—		
1037	0.40	23.53	1.148	9.20	8.04	73.1	—		
1042	0.50	23.50	1.144	9.36	8.06	65.6	—		
1047	0.60	23.47	1.141	9.57	8.05	94.1	—		
1052	0.80	23.49	1.142	9.69	8.10	96.1	—		
1057	1.00	23.54	1.143	9.83	8.07	84.9	—		
1100	START SAMPLE COLLECTION								
1120	END SAMPLE COLLECTION: 2L IPEC								
			0.05L IPEC (TRITIUM IN-HOUSE)						
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR
ACCUMULATION OF WATER
~~CONDENSATE~~ CB
CONDENSATE

WELL ID: MW 30 - 84

SAMPLE ID: 033

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40'S-50'S

PROJECT NO: 01.0017869.92
DATE: 11/30/11
SAMPLER(S): CB, SL

SAMPLING INTERVAL (depth in ft below top of casing)

77.3 to 85.4

SAMPLING PORT

84

TOTAL VOLUME PURGED: 0.40 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1016	0	PUMP	ON					6/12	40
1027	0.05	21.88	1.932	3.42	6.91	-66.6	NA		
1032	0.10	21.89	1.932	2.45	6.96	-72.0	—		
1037	0.15	21.46	1.933	2.26	7.00	-66.5	—		
1042	0.20	21.24	1.930	2.03	7.02	-62.3	—		
1047	0.25	20.94	1.929	1.95	7.04	-61.9	—		
1049	START SAMPLE COLLECTION								
1137	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	Z
turbidity meter	NA

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition FAIR
ACCUMULATION OF WATER CONDENSATE

WELL ID: MW 31 - 49

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: SUNNY, 40's - 50's

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S): CB, CG, SL

SAMPLING INTERVAL (depth in ft below top of casing)

34.8 to 49.3

SAMPLING PORT

49

TOTAL VOLUME PURGED: 1.15 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1002	0	PUMP	ON					6/7	29
1005	0.01	17.09	1.987	4.07	6.68	-60.2	2.42		
1010	0.22	17.46	2.050	2.03	6.81	-39.1	0.93		
1015	0.50	17.57	2.074	1.91	6.89	-20.5	0.79		
1020	0.75	17.68	2.081	1.94	6.93	-15.8	0.74		
1025	1.00	17.69	2.084	1.99	6.96	-18.5	0.70		
1026	START SAMPLE COLLECTION								
1032	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070125H

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition GOOD, VAULT WAS SEALED WITH CAULK NO WATER INFILTRATION

WELL ID: MW 31 - 63

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 48°. CLEAR, SUNNY

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S):

SAMPLING INTERVAL (depth in ft below top of casing)

55.8 to 63.8

SAMPLING PORT

63

TOTAL VOLUME PURGED: 0.53 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	- PUMP	ON -					6/7	29
1009	0.01	15.58	1.677	3.26	6.98	-143.4	2.08		
1014	0.02	15.58	1.638	0.71	6.98	-131.9	1.63		
1019	0.1	15.27	1.600	0.53	6.98	-121.9	1.74		
1024	0.18	15.82	1.588	0.62	6.98	-110.1	1.88		
1029	0.25	15.98	1.575	0.54	6.98	-99.9	1.63		
1034	0.31	16.03	1.560	0.54	6.98	-83.5	1.68		
1039	0.53	16.18	1.563	0.59	6.98	-75.3	1.38		
1048	START SAMPLE COLLECTION.								
1114	END								
	PUMP OFF		2L: IPEC.						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	07040093

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD CONDITION
WELL VAULT MOIST

WELL ID: MW 31 - 85

SAMPLE ID: 034

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: 48°, CLEAR, SUNNY

PROJECT NO: 01.0017869.92
DATE: 11/21/11
SAMPLER(S):

SAMPLING INTERVAL (depth in ft below top of casing)

69.8 to 85.4

SAMPLING PORT

85

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1001	0	- PUMP ON -						6/7	29
1009	0.01	16.14	2.117	0.98	7.21	-180.0	3.10		
1014	0.12	16.36	2.082	1.43	7.27	-170.2	2.41		
1019	0.2	16.51	2.055	1.90	7.27	-158.3	1.78		
1024	0.3	16.65	2.044	2.04	7.28	-142.5	1.44		
1029	0.39	16.75	2.037	2.17	7.28	-133.8	1.85		
1034	0.49	16.86	2.024	2.17	7.28	-117.3	1.26		
1039	0.59	16.89	2.019	2.25	7.27	-111.9	1.43		
1044	0.71	16.90	2.018	2.25	7.27	-102.5	2.26		
1049	0.80	16.80	2.017	2.20	7.26	-93.4	1.93		
1054	0.90	16.80	2.014	2.24	7.26	-79.4	2.25		
1059	1.00	16.89	2.015	2.22	7.26	-66.9	2.15		
1104	1.10	16.94	2.015	2.29	7.26	-59.2	2.17		
1106	1.25	START SAMPLE COLLECTION.							
1125	END PUMP OFF		2L: IPEC.						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition GOOD CONDITION
WELL VAULT MOIST

WELL ID: MW 32 - 59

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40s

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

28.3 to 61.3

SAMPLING PORT

59 6

TOTAL VOLUME PURGED: 1.60 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1342	0	PUMP	ON					8/11	40
1345	0.1	18.39	1.017	9.72	7.04	-84.5	7.42		
1350	0.61	19.12	1.008	10.73	7.41	-41.2	5.66		
1355	0.20	19.15	1.008	11.25	7.45	-31.2	6.00		
1400	0.8	19.18	1.012	10.26	7.47	-26.0	2.89		
1405	1.3	19.32	1.015	11.30	7.48	-23.0	1.55		
1408	1.45	START SAMPLE		COLLECTION.					
1415	END ~~STOP~~ PUMP OFF		SAMPLE	COLLECTION					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32190

WELL ID: MW 32 - 85

SAMPLE ID: 031

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

79.3 to 92.8

SAMPLING PORT

85 5

TOTAL VOLUME PURGED: 1.80 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1342	0	PUMP ON						8/11	40
1345	0.01	17.48	1.738	9.22	6.67	-244.6	3.31		
1350	0.12	17.57	1.753	10.09	7.09	-203.2	1.11		
1355	0.35	17.34	1.756	9.95	7.39	-188.1	0.86		
1400	0.49	17.27	1.756	8.08	7.02	-189.3	0.81		
1405	0.65	17.27	1.743	6.69	6.82	-188.4	0.00		
1410	0.79	17.30	1.738	5.85	6.78	-186.0	0.00		
1415	0.85	17.34	1.722	5.14	6.77	-187.1	0.11		
1420	0.95	17.43	1.710	4.26	6.91	-187.3	0.01		
1425	1.15	17.44	1.691	3.88	7.03	-185.1	0.03		
1430	1.47	17.51	1.684	3.64	6.90	-180.2			
1435	~~1.68~~	WENT DRY							
1443		START SAMPLE COLLECTION							
1508		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

1435 - well went dry.
Let recharge before taking sample

WELL ID: MW 32 - 149

SAMPLE ID: 028

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CR, CG

SAMPLING INTERVAL (depth in ft below top of casing)

147.3 to 156.8

SAMPLING PORT

149 3

TOTAL VOLUME PURGED: 0.90 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					10/12	58
1125	0.1	14.69	2.623	0.86	6.98	-217.1	1.29		
1131	0.2	17.08	2.561	0.74	6.98	-209.1	0.00		
1136	0.36	17.12	2.541	0.51	6.98	-200.3	0.37		
1141	0.49	17.25	2.529	0.44	6.98	-183.9	0.00		
1146	0.59	17.12	2.529	0.40	6.98	-171.2			
1149	0.94	START	COLLECTION						
1205		END SAMPLE	COLLECTION						

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	10070125 4

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 173

SAMPLE ID: 026

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40's

PROJECT NO: 01.0017869.92
DATE: 11/17/11
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

165.8 to 174.3

SAMPLING PORT

173 2

TOTAL VOLUME PURGED: 1.10 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					10/12	58
1125	0.1	17.12	2.378	0.75	6.24	-222.3	17.3		
1131	0.26	17.43	2.447	0.42	6.51	-220.6	1.12		
1136	0.55	17.50	2.458	0.28	6.68	-210.8	0.22		
1141	0.70	17.48	2.456	0.27	6.74	-203.6	0.32		
1146	0.80	17.44	2.449	0.21	6.78	-198.1			
1149	0.95	START COLLECTION							
1201	END SAMPLE COLLECTION								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070124

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition SEE MW-32-190

WELL ID: MW 32 - 190

SAMPLE ID: 030

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: OVERCAST, 40'S

PROJECT NO: 01.0017869.92
DATE: 11/17/14
SAMPLER(S): CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

180.3 to 193.9

SAMPLING PORT

190

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

1

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1120	0	PUMP	ON					10/12	58
1126	0.1	16.55	0.210	2.44	5.46	-268.3	1.57		
1131	0.19	18.43	1.419	0.90	6.51	-292.6	0.00		
1136	0.35	17.27	1.626	0.49	6.93	-286.9	0.00		
1141	0.48	17.20	1.644	0.39	6.92	-278.6	0.00		
1146	0.62	17.20	1.667	0.35	6.96	-275.9			
1148	0.75 START SAMPLE COLLECTION								
1203	END SAMPLE COLLECTION								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070 1254

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition FAIR-WELL VAULT PARTIAL FLOODED

WELL ID: MW-36-24
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 12/07/11
SAMPLER(S): CB, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 3.48 GW Elevation = 8.118 ACTUAL DEPTH = 21.376

Time	DTW or GW Elevation (ACTUAL DEPTH) (<0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1012	29.678	PUMP	ON						gal 0
1019	29.617	22.49	0.642	0.28	7.65	-184.6	3.11		0.10
1024	29.681	22.58	0.495	0.22	7.53	-124.4	1.31		0.28
1029	29.682	23.32	0.445	0.18	7.72	-109.8	1.34		0.45
1034	29.682	22.42	0.436	0.17	7.77	-152.7	2.03		0.60
1039	29.688	22.89	0.430	0.14	7.78	-125.5	1.17		0.75
1044	29.689	22.83	0.431	0.15	7.81	-123.4	1.21		0.86
1049	29.690	22.94	0.431	0.16	7.82	-130.1	1.24		1.10
1051	START SAMPLE COLLECTION								
1104	END SAMPLE COLLECTION: 2L IPEC								
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	280704293

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** GOOD

NOTES AND OBSERVATIONS: Total volume purged 1.30 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-41
SAMPLE ID: 018

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 40's

PROJECT NO: 01.0017869.92
DATE: 12/7/11
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
Well Vault Condition Good
WATER COLUMN HEIGHT (ft)
Well Diameter: 1 in

41 (DTB) - 2.95' (DTW) = 38.05 ft (Well Column Height)

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 38.05 x 0.041 (Multiplier) = 1.56 (Well Volume) gal

1.56 x 1.5 = 2.34 (Designed Purge Volume) gal

TOTAL VOLUME PURGED: 0.65 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1048	0	PUMP ON							
1052	0.30	~~2.19~~	12.18	1.106	0.61	7.68	-178.0	5.95	
1056	0.50	—	Well Dry; LET Recharge						
1304 → ~~1303~~	START SAMPLE COLLECTION								
1309	END	"		"	: 2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	AG
turbidity meter	20070127 20070125

NO PRODUCT OBSERVED [redacted] DTW = 2.95'

NOTES AND OBSERVATIONS:

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.
Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-36-52
SAMPLE ID: 023

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain, 40s

PROJECT NO: 01.0017869.92
DATE: 12/7/14
SAMPLER(S): SL, CB

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

52 (DTB) - 6.45 (DTW) = 45.55 ft (Well Column Height)

Well Vault Condition Good
Well Diameter: 1 in

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 45.55 x 0.041 (Multiplier) = 1.87 gal (Well Volume)

1.87 x 1.5 = 2.80 gal
Designed Purge Volume

TOTAL VOLUME PURGED: 2.95 gal

WATER QUALITY: DTW = GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1048	0	PUMP	ON						
1052	0.25	15.20	23.51	0.904	1.02	7.56	-115.2	1.96	
1059	0.75	20.04	23.08	0.805	0.67	7.68	-78.6	3.39	
1103	1.00	21.37	22.99	0.762	0.35	7.72	-117.7	2.43	
1109	1.50	22.66	23.34	0.842	0.51	7.72	-134.1	1.49	
1114	2.00	22.88	23.28	1.275	0.70	7.48	-152.9	1.84	
1121	2.25	25.89	22.76	1.279	0.84	7.47	-164.6	1.20	
1124	2.50	26.93	22.76	1.298	1.14	7.40	-150.6	1.28	
1127	2.80	26.90	22.96	1.381	2.07	7.36	-144.7		
1128	START SAMPLE COLLECTION								
1136	END	"		"	: 2L IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	10070125 4

NOTES AND OBSERVATIONS: DTP = 6.44' DTW = 6.45'

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-22
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain Showers 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): SL, CB, CG
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.64 GW Elevation = 6.212 ACTUAL DEPTH = 13.248

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes gal
1021	13.248	PUMP ON							0
1025		PUMP	OFF (NEEDED MARINE BATTERY)						
1033		PUMP	ON						
1040	13.092	25.59	2.023	1.31	7.41	-81.4	2.89		0.01
1045	13.109	25.98	2.004	0.59	7.46	-30.8	2.52		0.11
1050	13.092	26.15	1.984	0.29	7.47	-49.8	2.48		0.20
1055	13.119	26.33	1.956	0.32	7.48	-78.8	3.19		0.30
1100	13.110	26.43	1.941	0.35	7.50	-131.0	3.02		0.40
1105	13.089	26.55	1.928	0.31	7.50	-127.1	2.64		0.50
1110	13.114	26.56	1.927	0.35	7.50	-125.4	3.14		0.60
1112	START	SAMPLE COLLECTION							
1133	END	"	"		:2L IPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	4
flow meter	
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.75 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-32
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Rain Showers 50's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): SC, CB, CR
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 8.45 GW Elevation = 6.341 ACTUAL DEPTH = 16.117

Time	DTW or GW Elevation (ACTUAL DEPTH) (+/- 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes
1021	16.117	PUMP ON							0
1025		PUMP OFF (NEEDED MARINE BATTERY)							
1033		PUMP ON							
1040	16.007	25.33	1.715	1.41	7.33	4.2	2.17		0.03
1045	16.005	25.70	1.684	0.49	7.31	2.5	1.68		0.10
1050	16.021	25.80	1.665	0.42	7.34	-2.4	1.55		0.25
1055	16.046	25.88	1.655	0.34	7.36	-3.6	1.24		0.35
1057	START	SAMPLE COLLECTION							
1119	END	"	"		±2 IPEC				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
flow meter	~~20070254~~
turbidity meter	20070254

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.50 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

GZA GeoEnvironmental of New York
Modified Traditional Purge
Sampling Data Sheet

WELL ID: MW-37-40
SAMPLE ID: 024

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/23/14
SAMPLER(S): CB, CG, SL

Measured Well Depth _____ **(feet from top of casing)**
WATER COLUMN HEIGHT (ft)

Well Vault Condition Good
Well Diameter: 1 in

40 (DTB) - 6.40 (DTW) = 33.6 **Well Column Height** ft

Diameter	Multipliers
1	0.041
2	0.163
4	0.653

GALLONS OF WATER PER WELL VOLUME:

Water Column Height 33.6 x 0.041 **Multiplier** = 1.37 **Well Volume** gal

1.37 x 1.5 = 2.06 **Designed Purge Volume** gal

TOTAL VOLUME PURGED: 2.21 gal

WATER QUALITY: DTW = 6.40 GW Elevation

Time	Volume Purged (gal)	DTW or GW Elevation (< 0.3 ft)	Temp (°C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Notes
1034	0	7.420	PUMP ON						
1040	0.15	9.54	26.07	2.107	1.20	7.31	-229.1	3.46	
1045	0.30	9.62	26.11	2.015	0.54	7.28	-233.7	2.26	
1050	0.50	10.01	26.11	1.996	0.39	7.29	-225.2	2.16	
1055	0.60	10.10	26.04	1.997	0.29	7.29	-220.2	1.80	
1200	0.75	10.28	25.99	1.964	0.31	7.29	-261.4	141.6	
1205	1.00	10.56	25.89	1.940	0.23	7.29	-253.8	140.2	
1210	1.40	10.64	25.88	1.936	0.23	7.29	-256.4	141.9	
1215	1.56	10.35	25.84	1.933	0.20	7.29	-261.1	143.2	
1220	1.60	10.15	25.80	1.926	0.20	7.29	-260.0	135.1	
1225	1.68	9.60	25.50	1.922	0.19	7.29	-256.3	145.0	
1230.	1.73	8.39	25.32	1.891	0.14	7.30	-265.2	113.3	
12.35.	2.21	START SAMPLE COLLECTION.							
1146		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	16
turbidity meter	20070429 3

NOTES AND OBSERVATIONS: Lots of very fine silt in purge water.

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW-37-57
SAMPLE ID: 024

GZA GeoEnvironmental of New York
Low-Flow Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: RAIN, 40's

PROJECT NO: 01.0017869.92
DATE: 11/23/11
SAMPLER(S): CB, CG, SL
PUMP DEPTH: _____ ft

WATER QUALITY: DTW = 6.25 GW Elevation 8.538 ACTUAL DEPTH = 44.322

Time	DTW or GW Elevation ACTUAL DEPTH (< 0.3 ft)	Temp (^{0}C) (3%)	Specific Conductivity (S/cm) (3%)	Dissolved Oxygen (g/l), (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Flow Rate (gal/hr)	Notes GAL
1134	44.292		PUMP ON.						0
1140	44.019	25.94	1.872	3.79	6.68	136.6	1.40		0.03
1145	44.019	25.92	1.876	1.61	6.78	67.7	0.95		0.06
1150	44.019	25.86	1.876	1.42	6.74	60.5	1.15		0.19
1155	44.019	25.70	1.870	1.32	6.72	58.6	1.10		0.31
1200	44.019	25.61	1.870	1.30	6.72	58.3	1.11		0.49
1204		START SAMPLE COLLECTION.							0.65
1222		END SAMPLE COLLECTION							
		PUMP OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	5
flow meter	
turbidity meter	20070429S

Measured Well Depth _____ **(feet from top of casing)** **Well Vault Condition** Good

NOTES AND OBSERVATIONS: Total volume purged 0.65 gal

Depth and Depth to Water (DTW) measurements are given in feet from top of casing.

Groundwater Elevation measurements are given in feet msl.

WELL ID: MW 39 - 67

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

65.0 to 70.5

SAMPLING PORT

67 7

TOTAL VOLUME PURGED: 1.46 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP ON			6.67			6/6	34
1307	0.1	13.74	1.272	7.67	~~141.9~~	~~141.9~~	2.81		
1312	0.25	14.07	1.308	6.60	7.02	-128.3	2.42		
1317	0.40	14.14	1.319	6.10	6.85	-114.2	1.92		
1322	0.50	14.30	1.329	5.73	7.03	-88.7	2.11		
1327	0.65	14.40	1.336	5.73	6.92	-71.7	2.71		
1332	0.80	14.45	1.343	5.64	7.01	-54.5	1.74		
1337	1.00	14.58	1.344	5.73	7.01	-40.5	1.36		
1342	1.17	14.56	1.347	5.76	7.05	-37.3	2.19		
1347	1.31	14.53	1.348	5.69	7.08	-35.7	1.64		
1349	START	SAMPLE	COLLECT	TOV					
1404	END	"	"	~2L	IPEC				
	PUMP	OFF		20mL	(H3	IN-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A (feet from top of casing)

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 84

SAMPLE ID: 013

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear, 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/14
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

76.5 to 85.0

SAMPLING PORT

84 6

TOTAL VOLUME PURGED: 1.25 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP	ON					6/6	34
1307	0.01	13.10	1.661	3.25	6.52	-152.1	2.19		
1312	0.10	13.43	1.656	3.54	6.63	-154.0	1.86		
1317	0.20	13.47	1.650	3.60	6.71	-149.7	1.68		
1322	0.30	13.65	1.632	3.78	6.81	-131.5	1.98		
1327	0.40	13.96	1.621	3.89	6.89	-125.6	1.90		
1332	0.50	14.11	1.618	3.93	6.94	-116.4	1.31		
1337	0.68	14.31	1.614	4.02	6.99	-102.0	1.31		
1342	0.73	14.35	1.613	4.04	6.99	-101.0	1.12		
1347	0.81	14.37	1.613	4.05	6.98	-98.4	1.47		
1352	0.99	14.39	1.611	4.19	7.01	-86.3	1.91		
1357	1.10	14.41	1.611	4.56	7.01	-79.5	1.44		
1359	START	SAMPLE	COLLECTION						
1417	END	"	"	"	EPEC				
	PUMP OFF								

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070473

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 102

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear, 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

93.0 to 103.0

SAMPLING PORT

102 4

TOTAL VOLUME PURGED: 0.95 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1255	0	PUMP ON						6/6	34
1312	0.01	13.31	1.585	1.62	6.98	-138.0	3.20		
1317	0.10	13.28	1.604	1.94	6.98	-148.0	2.25		
1322	0.20	13.49	1.654	2.38	6.98	-153.4	1.71		
1327	0.30	13.78	1.684	2.72	6.98	-152.2	1.96		
1332	0.45	13.92	1.697	2.81	6.98	-148.5	1.92		
1337	0.60	14.11	1.707	2.90	6.98	-138.9	2.37		
1342	0.69	14.14	1.708	2.94	6.98	-140.0	1.19		
1347	0.80	14.13	1.712	2.93	6.98	-134.3	2.13		
1349	START	SAMPLE COLLECTION							
1410	END	"	"	2L IPEC					
	PUMP OFF			20mL (H^3 IN-HOUSE)					

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	200704293

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 124

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

193.0 to 198.6

SAMPLING PORT

195 1

TOTAL VOLUME PURGED: 0.57 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP ON						8/10	70
1040	0.01	15.09	1.227	7.65	6.24	-259.4	1.88		
1045	0.12	15.04	1.225	1.02	6.40	-271.2	2.19		
1050	0.19	14.99	1.222	0.72	7.26	-283.4	1.26		
1055	0.28	15.01	1.216	0.60	7.59	-276.3	1.97		
1100	0.34	15.04	1.213	0.51	7.63	-282.6	0.83		
1105	0.42	15.01	1.209	0.44	7.64	-284.9	1.23		
1109	START	SAMPLE	COLLECTION						
1142	END	"	"	: 2L	IPEa				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	1
turbidity meter	20070429 3

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 183

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

169.5 to 186.0

SAMPLING PORT

183 2

TOTAL VOLUME PURGED: 1.55 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (°C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP	ON					8/10	70
1040	0.40	14.85	1.137	0.98	6.78	-149.0	0.82		
1045	0.70	14.75	1.142	0.63	6.91	-138.4	0.85		
1050	0.80	14.86	1.141	0.45	6.97	-133.4	1.87		
1055	1.00	14.74	1.139	0.39	6.99	-134.8	1.00		
1100	1.20	14.72	1.137	0.30	7.01	-134.9	1.26		
1105	1.40	14.64	1.132	0.26	7.02	-131.6	1.21		
1109	START	SAMPLE COLLECTION							
1126	END	"		"	2L IPE&				
	PUMP	OFF							

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	2
turbidity meter	20070393

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge

WELL ID: MW 39 - 195

SAMPLE ID: 014

GZA GeoEnvironmental of New York
Waterloo Sampling Data Sheet

CLIENT: Entergy - IPEC
SITE: Buchanan, NY
WEATHER: Clear 40-50s

PROJECT NO: 01.0017869.92
DATE: 12/1/11
SAMPLER(S): SL, CB, CG

SAMPLING INTERVAL (depth in ft below top of casing)

115.0 to 126.5

SAMPLING PORT

124

3

TOTAL VOLUME PURGED: 3.65 gal

PURGE RATE: variable (gal / min)

PURGE METHOD: Double Valve Pump

WATER QUALITY:

Time	Purged Volume (gal)	Temp (^{0}C) (3%)	Specific Conductivity (mS/m) (3%)	Dissolved Oxygen (mg/l) (10%)	pH (SU) (+/- 0.1)	ORP (m/Volts) (+/- 10)	Turbidity (NTU) (10%)	Drive/Vent Cycle (seconds)	Drive Pressure (psi)
1032	0	PUMP	ON					8/10	70
1040	0.90	15.33	2.340	0.40	6.98	-205.6	8.45		
1045	1.30	15.24	2.180	0.68	6.98	-179.3	6.35		
1050	1.90	15.24	2.101	0.90	6.98	-159.6	9.60		
1055	2.20	15.21	2.069	1.12	6.98	-152.3	6.90		
1100	2.50	15.08	2.030	1.40	6.98	-141.5	9.60		
1105	3.00	15.04	2.005	1.70	6.98	-129.7	7.15		
1110	3.20	15.00	2.004	1.75	6.97	-123.4	4.49		
1117	3.50	15.29	1.994	1.88	6.98	-120.3	3.56	↓	↓
1119	START	SAMPLE	COLLECTION						
1128	END	"		"		2L FPEC			
						20mL (H^3 IN-HOUSE)			

Equipment Used	Equipment Identification #
YSI 556 MPS Reader and 5563 Sonde	3
turbidity meter	10070493

NOTES AND OBSERVATIONS:

Measured Well Depth N/A **(feet from top of casing)**

Well Vault Condition Poor, broken hinge